

# BUSINESS WEEK



PUBLISHED BY THE MCGRAW-HILL PUBLISHING COMPANY

UNIVERSITY OF MICHIGAN  
GENERAL LIBRARY  
ANN ARBOR MICH

---

# This is America's last chance

## What are you doing about it?

---

"P  
Pearl Harbor is inviolate"—yet it was attacked.

"Singapore is impregnable"—but it fell.

"America and Britain control the seas"—yet Nazis sink tankers in sight of New York; the Japs shell California.

"Our Navy can repel any invasion"—but now the Axis Navy outnumbered ours.

We lull ourselves to sleep with the things we *want* to believe, and while we sleep our enemies close in from either side.

Listen to the talk in factories, offices—and legislative halls. Oh, yes, the war is terrible, and it must be won—*by somebody else*. We must keep our social gains, our easy hours, our lush profits, our personal powers . . . The enemy who will take them *all* away is closing in.

There is only one way for any business man, labor leader, politician or workman to decide everything—"Will it help win the war?" There is no compromise with that question. Because too many in every one of these groups asked, instead, "Will it help me?" we have had Manila, Singapore, Java, Rangoon. Make no mistake—New York, Los Angeles, Chicago, Omaha can be next.

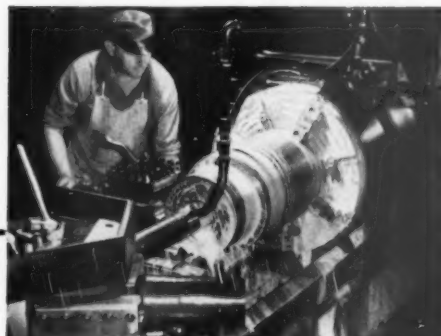
For two years 3600 men in this plant have been working desperately to turn out the turret lathes other men must use to make the planes, tanks and guns our soldiers and sailors must have.

We—your fellow workmen—have built these tools to stand full-speed use 24 hours a day, 7 days a week. Unless you who operate these machine tools and all the others we have built in the past ten years—unless you will use them that way, to the utmost, we'll go down as France did and for the same tragic reasons—selfishness and indifference.

WARNER  
&  
SWASEY  
Turret Lathes  
Cleveland

YOU CAN TURN IT BETTER, FASTER, FOR LESS

... WITH A WARNER & SWASEY



# WASHINGTON BULLETIN

## WHAT THE WASHINGTON NEWS MEANS TO MANAGEMENT

### All Out—But Not Now

The War Production Board is being outrun by the pace and scale of the war.

Donald Nelson's leadership isn't getting the results that he himself knows to be necessary. He wants to be tough, he wants to bring to a dead stop civilian production that is holding back the war program, and he wants to do it now. But his all-out policy has its teeth drawn by the time it is applied in practice. WPB's curtailment orders are multiplying, but most of them still throw their full effect into the future.

• **Watered Down**—Nelson's spirit evaporates in the pulling and the tugging, the hemming and the hawing, the bickering and the bargaining to which every order is exposed before it emerges in final form.

### Appraising the Chief

Nelson's leadership is wavering under discouragement, under the disheartening performance of his organization. A forbearing, almost indulgent attitude is evident in WPB towards its chief. His aides from industry feel that they have to make allowances for the fact that Nelson never had charge of a plant, never has had to deal with labor—consequently can't be expected to consider factors which are the constant concern of industrial management. Nelson initiated the Production Drive to give labor a sense of responsibility, neither realizing nor sharing the fear of employers that labor might use the drive to seize managerial responsibility.

### Not Much Time

Nelson knows that WPB isn't delivering the goods. He's trying to cut through the conservatism, the caution, the inertia which pervades the organization. He may attempt to purge the staff. He's stayed his hand so far because he feels that he's got to have industrial brains to do the job.

But it's a real question now whether Nelson will succeed before he himself is pulled down. The progress of the war won't give him much more time. He's had three months, and the New Deal all-outers are snapping at his heels.

• **Example of Jesse Jones**—Already they have got Jesse Jones on the defensive. They are maneuvering to take the stockpiling program out of RFC, put it in the Economic Warfare Board, with Milo Perkins in charge. Perkins now is handicapped because he doesn't have authority to buy from Latin America or

elsewhere raw materials which we desperately need and which we want to keep out of Axis hands. The verdict against Jones is that he hasn't bought nearly enough.

### Material Shortage Critical

Army and Navy are just completing the first thoroughgoing determination of the raw-materials requirements of the munitions program. The results are appalling. As to nearly every metal, the military demand alone exceeds the supply, regardless of what cuts are made in civilian demands.

It is this situation, rather than any tenderness toward civil needs, which has produced the new pressure for material conservation in military production (page 65).

Essential to operation of Donald Nelson's requirements committee, the study has been under way for several months, is within a week or two of completion. It is drafted in terms which will permit quick allowance for changes—how much material another million men in the Army would require, how much nickel would be saved by reducing the alloy of ship shafting.

### No Arbitrary Profits Limit

A flat limit on war profits of 6% or any other arbitrary figure isn't in the cards. Various proposals now getting publicity will be blocked by the Administration's decision to recapture profits by the tax route. The only chance that a profit lid had was as a device to reconcile labor to suspension of the 40-hour week law. Now that that issue is petering out, profit limitation has no chance.

### Allocating Tools

An allocation system has governed distribution of all items important to the war effort, with one important exception—machine tools. But tools soon will be allocated with a vengeance. Bulk of machine-tool distribution heretofore has been in strict accord with the theory of the priority rating system—so much so that it proved necessary to subdivide ratings of A-1-a, A-1-b, etc., by the use of a list of some 300 major tool users, arranged in numerical order of preference.

Plan now being studied is to drop priority ratings entirely, have the government buy the entire output of the machine-tool industry, and sell tools to users who it thinks ought to have them. This has been done in a small way for

some time through the RFC-WPB tool pool.

Major advantage claimed for the new plan is that it would distribute the load on the industry. At present top-ranking builders of each type of tool have huge backlogs of orders, while some of their less-liked or less-known competitors can make quicker deliveries. Pooling also would ease the emotional strain on tool builders who have to turn down erstwhile preferred customers in favor of upstarts like the airplane industry.

• **Specialization Difficulty**—Lack of some method of handling special-design tools and special-purpose tooling still is an obstacle to the plan, but an incidental effect might be to reduce the amount of such technological luxury.

### Defeating Plant-Seizure Purpose

War Labor Board officials are ruefully wondering what good government seizure of plants is as a means of deterring other employers from obstructing settlement of labor disputes. George P. McNear, Jr., won't draw any salary as president of the Toledo, Peoria & Western as long as the road is managed by the government, but officials point out that as its principal stockholder McNear stands to lose nothing.

It was the same, they say, with the Navy's take-over of the Kearny plant of the Federal Shipbuilding & Drydock Co. During the period of the Navy's operation, production is reported to have increased appreciably. The company paid the Navy a management fee—not very large, apparently—out of the profits. Now the same issue that closed the plant before—maintenance of union membership—is up again before the War Labor Board (page 74).

• **Tougher Than Seizure**—Officials are beginning to think that something tougher than formal plant seizure is needed to back up the board's decisions. They argue that the President's war powers permit him to take profits, as well as control, when he seizes a plant.

### Controlling Ore on the Lakes

OPA has placed under complete control the movement of iron ore on the Great Lakes, which is expected to reach a record 90,000,000 gross tons. It has slapped a price ceiling on the ore, effective April 1, and frozen the port-to-port carrying rate at 77¢ a ton. In fixing this pattern on prices and the water-hauling charges, OPA overrode protests of both ore producers and carriers.

Prices are based on the weighted aver-



**I**t's *OUR* war now. It's up to *US*. And "us" doesn't mean only the young men in the Army, on the ships, in the air. "Us" means "*us*"—not to be confused with "they" or "them," meaning somebody else.

For every one of *them* now in action or in training, there are ten or more of *us* who have the duty and the responsibility of providing the guns, tanks, ships, planes, the astronomical quantities of other material and supplies upon which the winning of this kind of war depends.

It's a *war of production*. That's clear. It's a *war of movement*. That's clear too, in the military sense. But to us who are especially concerned with the nation's traffic, "war of movement" has a profoundly special meaning. Untold millions of dollars, tons of materials and man-hours of human time go into America's production. But it takes

one more vital thing to make that production worth anything. It takes *movement—transportation!*

Transportation of the character and of the capacity that is essential now and for the future is a job for the carriers, particularly rail carriers, AND the shippers. They are partners in a Herculean task—joined by bonds of an awful co-responsibility to enable America's production to move, work, fight.

Together they have already left former standards and old goals far behind. But this isn't enough. Transportation has to do more—much more—to keep apace and ahead of our war production, now just hitting its stride.

There's the challenge. It is being met, and will continue to be met by shippers and railroads working together—*making every freight car do more work every day.*

NATIONAL ASSOCIATION OF SHIPPERS ADVISORY BOARDS

Reprinted by  
Association of **AMERICAN RAILROADS**

WA  
age of 1  
low \$4.1  
at lower  
of ore i  
blast fu  
asked th  
lished q  
wanted  
The  
newly-d  
terior m  
rate was  
whose o  
unlike t  
by steel  
coal car  
ports.

All Su

After  
ing offi  
control  
This m  
ministr  
large us  
mally b  
to hom  
users w  
sellers.

The  
plan wa  
from re  
them g  
tions of  
ever, la  
register  
petitors  
made to  
Market  
of local  
derstan  
• Reac  
tion ad  
rift bet  
and th  
(BW—  
was the  
turn of

Test C

Org  
succum  
since t  
drive t  
practic  
sales)  
fixing  
sachus  
threw  
Arnold  
pleade  
22'41.  
nold h  
ready  
cery B  
This  
Yankw

Busine

age of 1941 sales and range slightly below \$4.15 per gross ton, base, delivered at lower ports whence the great volume of ore is moved by rail to consuming blast furnaces. The ore producers had asked that the price be fixed at the published quotation of \$4.45 and carriers wanted to boost their rate to 85¢.

The \$4.45 price was allowed for newly-developed mines in the Lake Superior region and the higher carrying rate was granted for small lake carriers whose operating costs are high because, unlike the large carriers, owned chiefly by steel companies, they do not carry coal cargo on the return trip to northern ports.

## All Sugar in OPA's Hands

After weeks of wrangling, OPA rationing officials have finally won complete control over the distribution of all sugar. This means that the Office of Price Administration will handle distribution to large users in the food industry who normally buy direct from refiners, as well as to home consumers and small industrial users who normally buy from wholesalers.

The War Production Board's original plan was to exempt large industrial users from registering on April 28-29, letting them get their sugar through the operations of its allocation system. Now, however, large industrial users may have to register along with their smaller competitors, although a proposal has been made to let them deal with local Surplus Marketing Administration offices instead of local rationing boards who don't understand food industry operations.

• **Reaction in WPB**—Shift of jurisdiction adds another ripple in the current rift between WPB sugar section officials and their Food Supply Branch bosses (BW-Mar.14'42,p7), but this time it was the latter who felt bad at the latest turn of events.

## Test Case Shapes Up

Organized retail grocers have been succumbing as readily as fish in a barrel since the Antitrust Division started its drive to keep the various state unfair practices acts (which ban below-cost sales) from being perverted into price-fixing springboards. In Colorado, Massachusetts, and Connecticut the grocers threw in the sponge as soon as Thurman Arnold put the finger on them, and pleaded nolo contendere (BW-Feb.22'41,p47; Nov.8'41,p8). But now Arnold has run up against a group that's ready to fight it out—the Food and Grocery Bureau of Los Angeles.

This week Federal Judge Leon R. Yankwich adjudged the bureau guilty of

conspiring to fix prices "under the guise of enforcing the act." But instead of taking this decision and a \$5,000 fine meekly, the bureau and 12 present and former officers will appeal to the Federal Court in San Francisco. Action against a group of co-defendants meantime was dropped (BW-Mar.28'42,p52) while 16 others pleaded nolo contendere and were fined a total of \$33,000.

## No Time-Space Sale

Hopes of advertising media that the government would emulate England and become a bigtime advertiser have been dashed by Archibald MacLeish's Interdepartmental Committee on War Information. Propaganda agencies such as the Office of Facts and Figures, Donovan's Office of Information, and Rockefeller's Office of Inter-American Affairs

say they are getting without cost all the white space and time they need—even more than they need.

• **Afraid of the Onslaught**—They realize England has had good results as buyer of one-sixth of all the advertising in that country (BW-Feb.14'42,p54), but they also worry about what they'd be up against if 20,000 newspapers and periodicals and 900 radio stations descended on Washington in search of their slice of a government advertising melon.

## Rationing Propaganda

With a shortage of both coal and transportation expected next winter, hundreds of radio stations have been enrolled in a campaign to fill millions of coal bins before April 15.

Actually the coal campaign is being used to test the powers of government

## Recruiting Small Business for War Production

Little business is finally going to get a break that means something—little business, that is, which can manufacture. For the distributor there is no hope in sight.

The increasing scale and the gathering speed of the war production job makes any existing plant, no matter how small, look pretty good. Time is too short to put all our trust in special-purpose arsenals that might be overwhelmingly productive but still aren't built. The little plants are needed for arms work, and they're going to be used.

There's never been any secret as to the obstacles. One is financial. The little fellows don't have the capital needed to convert and can't compete on price. RFC might have helped, but Jesse Jones has a banker's affection for a sound loan—and these are cats and dogs.

Another obstacle is that overloaded procurement officers can't be bothered splitting up a contract ten ways just to help a poor devil who's losing his business. And prime contractors, if they aren't determined to hang on to the juicier stuff themselves, prefer to subcontract with known and trusted firms. WPB and its predecessors have tried to break this blockade by establishing one unit after another to concentrate on getting business for small concerns. These units, however, could line up all the pools they wanted, but when it came to the pinch they couldn't place the contracts.

Last month's abolition of competi-

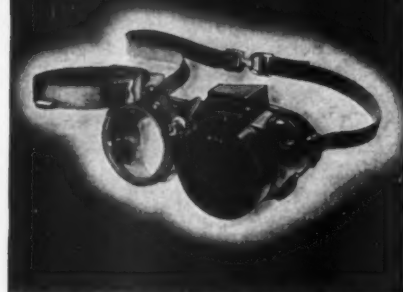
tive bidding (BW-Feb.21'42,p5) led off a series of moves to eliminate these obstacles. With all contracts now let by negotiation, the high-cost producer is no longer automatically barred.

Essence of the Murray small business bill, now before Congress, is its provision for giving WPB a share in the jealously guarded military prerogative of awarding contracts. A Smaller War Plants Corp. under Donald Nelson's thumb would take contracts from the Army and Navy, subcontract them to whatever plants it could locate. The military face would be saved by leaving to the Army and Navy the technical letting of the prime contract; the services would also retain control over final inspection and acceptance of the goods. But until after he got a contract, the small producer wouldn't have to deal with the services at all.

And the small fellows wouldn't have to deal with Jesse Jones either. SWPC would perform for its proteges all the financial services of the RFC. It would make and guarantee loans, build plants and lease them to its contractors after the manner of RFC's Defense Plant Corp.

Without waiting for passage of the Murray bill, Roosevelt has built another detour around Jones by authorizing the Army, Navy, and Maritime Commission to make loans to contractors, sub-contractors, or any business important to the war or to guarantee loans made by banks or government corporations (page 75).

# Economy



More economical protection is obtained from Willson Industrial Goggles and Respirators in rough shop use, because of skilful design and careful selection of materials.



There is a Willson Goggle, Respirator, Gas Mask or Helmet for every industrial hazard. See your local Willson Representative or write direct.

GOGGLES • RESPIRATORS • GAS MASKS • HELMETS

**WILLSON**  
DOUBLE  
PRODUCTS INCORPORATED  
READING, PA. U.S.A.

## WASHINGTON BULLETIN (Continued)

propaganda. The scheme has been hatched by the Office of Facts and Figures, after weeks of conferences with executives of the broadcast medium along with advertisers and advertising agencies.

The whole idea is cooperative, with the Office of Facts and Figures acting as a clearing house for all government radio propaganda and rationing it to the networks and stations. The plan is designed to cure a propaganda disease tagged "war fatigue," a sort of shell-shock induced by the barrage of Washington plugs that fill every loudspeaker (BW—Feb. 28'42, p. 28). This first became noticeable when listeners began to resent the deluge of defense bond announcements.

### The Street Cars Stay

Ban on conversion of street rail lines to bus operations (page 18) actually does no more than formalize a policy that Transportation Director Eastman's local transit staff and WPB's transportation branch have pursued in several individual cases, notably New York's Third Avenue Line which had secured delivery on half the buses it wanted before Eastman stepped in.

• **Rolling Its Own**—Significance lies more in the source than in the content of the order—Eastman heads the only defense agency outside of WPB which issues its own rules under its own seal.

### Picketing Precedents

If Supreme Court labor decisions proved anything this week, they proved that each labor controversy is a case unto itself. Two more precedents on the legality of picketing—precedents that will be controlling only if identical issues are presented to the courts—were established in cases involving New York bakery peddlers and a Texas café owner whose restaurant was picketed by A.F.L. carpenters because he was employing non-union labor on a building project a mile and a half away. In holding this picketing illegal under a Texas statute, the court recognized that the right of workers to communicate their grievances by picketing was guaranteed by the freedom-of-speech clauses in the Constitution, but it ruled that states do have "power to confine the sphere of communication to that directly related to the dispute."

In the New York case, the court held that A.F.L. teamsters could picket independent peddlers who bought goods from large bakeries and sold them direct to retailers. Because of the attempt of bakeries to force their own drivers to operate as peddlers and provide their

own trucks, the court recognized that the teamsters had a legitimate grievance against the peddlers.

### Coming Closer

The Supreme Court took another nibble at deciding the Constitutionality of the Wisconsin Peace Act, which forbids strike violence (BW—Mar. 7'42, p. 8), by upholding the Wisconsin Board in its crackdown on C.I.O. electrical workers at the Allen-Bradley plant in Milwaukee and by ruling that the issue did not have to be decided exclusively in terms of the federal Wagner Act. Pointedly, however, the court observed that its decision did not intimate an "opinion as to the validity of other types of orders" from the Wisconsin board "where the federal board has not assumed jurisdiction."

### Capital Gains (and Losses)

The war program is now under more or less continuous investigation by congressional committees representing nearly every major sector of opinion. While the left-most Tolan committee plumps for the Murray Plan of labor-management committees, the orthodox New Deal Truman committee snipes at the dollar-a-year men in WPB, the Faddis military affairs sub-committee supports them, and the Byrd economy committee blames defense troubles on New Deal reformers.

Synthetic rubber schedules got another big boost this week—from the 400,000-ton goal of only a few weeks ago to 700,000. New producers in the chemical and oil industries are embraced in the program, which is supposed to be rolling by the end of next year. A good many fingers are crossed in Washington, however.

A new form of legal tender was created when WPB ruled that purchasers of new tubes of shaving cream and toothpaste had to put a used tube along with their cash on the counter.

Into a Washington bulging at the seams, Federal Security Administrator McNutt has summoned 6,000 civic leaders to talk over fund-raising for the U.S.O. Goal is to raise 2¢ a day per soldier and sailor.

Ben Cohen, the braintruster, who formerly drew \$9,000 a year as general counsel of the National Power Policy Committee, now is giving his services to the government.

The Navy has asked Congress for \$130,000 to buy pennants for plants that perform top production jobs.

—Business Week's  
Washington Bureau

# FIGURES OF THE WEEK

## THE INDEX (see chart below)

### PRODUCTION

	§ Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
THE INDEX (see chart below)	*178.0	†177.0	174.7	160.6	153.2
Steel Ingot Operations (% of capacity)	98.8	99.0	97.2	96.9	99.2
Automobile Production	28,915	28,875	30,085	77,035	124,165
Engineering Const. Awards (Eng. News-Rec. 4-week daily av. in thousands)	\$28,801	\$31,717	\$28,142	\$22,331	\$17,394
Electric Power Output (million kilowatt-hours)	3,346	3,357	3,410	3,273	2,975
Crude Oil (daily average, 1,000 bbls.)	3,820	3,692	4,016	4,060	3,747
Bituminous Coal (daily average, 1,000 tons)	1,813	1,842	1,833	1,655	1,879

### TRADE

Miscellaneous and L.C.L. Carloadings (daily average, 1,000 cars)	87	87	83	93	81
All Other Carloadings (daily average, 1,000 cars)	46	46	46	58	47
Check Payments (outside N. Y. City, millions)	\$6,290	\$6,967	\$5,527	\$5,704	\$5,214
Money in Circulation (Wednesday series, millions)	\$11,462	\$11,474	\$11,422	\$10,070	\$8,842
Department Store Sales (change from same week of preceding year)	+26%	+24%	+25%	+12%	-2%
Business Failures (Dun & Bradstreet, number)	268	193	215	181	302

### PRICES (Average for the week)

Spot Commodity Index (Moody's, Dec. 31, 1931 = 100)	231.8	229.7	228.5	214.0	184.2
Industrial Raw Materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)	154.8	154.2	153.3	145.2	134.9
Domestic Farm Products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)	183.8	181.7	180.5	161.8	131.5
Finished Steel Composite (Steel, ton)	\$56.73	\$56.73	\$56.73	\$56.73	\$56.73
Scrap Steel Composite (Iron Age, ton)	\$19.17	\$19.17	\$19.17	\$19.17	\$20.25
Copper (electrolytic, Connecticut Valley, lb.)	12.00¢	12.00¢	12.00¢	12.00¢	12.05¢
Wheat (No. 2, hard winter, Kansas City, bu.)	\$1.19	\$1.21	\$1.24	\$1.13	\$0.87
Sugar (raw, delivered New York, lb.)	3.74¢	3.74¢	3.74¢	3.50¢	3.40¢
Cotton (middling, ten designated markets, lb.)	20.20¢	19.55¢	19.34¢	16.59¢	10.99¢
Wool Tops (New York, lb.)	\$1.333	\$1.311	\$1.281	\$1.303	\$1.277
Rubber (ribbed smoked sheets, New York, lb.)	22.50¢	22.50¢	22.50¢	22.50¢	22.63¢

### FINANCE

90 Stocks, Price Index (Standard Statistics)	64.0	64.8	67.9	80.6	79.2
Medium Grade Corporate Bond Yield (30 Baa issues, Moody's)	4.27%	4.30%	4.30%	4.32%	4.34%
**U. S. Bond Yield (average of all taxable issues due or callable after twelve years)	**2.33%	2.35%	2.38%	2.13%	#
**U. S. Treasury 3-to-5 year Note Yield (taxable)	**0.93%	0.94%	0.94%	0.65%	0.84%
Call Loans Renewal Rate, N. Y. Stock Exchange (daily average)	1.00%	1.00%	1.00%	1.00%	1.00%
Prime Commercial Paper, 4-to-6-months, N. Y. City (prevailing rate)	1/8%	1/8%	1/8%	1/8%	1/8-1/4%

### BANKING (Millions of dollars)

Demand Deposits Adjusted, reporting member banks	24,574	25,010	24,712	24,390	23,259
Total Loans and Investments, reporting member banks	30,781	31,031	30,943	29,120	26,918
Commercial and Agricultural Loans, reporting member banks	7,008	7,035	6,902	6,389	5,420
Securities Loans, reporting member banks	815	825	881	918	995
U. S. Gov't and Gov't Guaranteed Obligations Held, reporting member banks	15,644	15,759	15,855	14,397	13,334
Other Securities Held, reporting member banks	3,735	3,826	3,696	3,769	3,786
Excess Reserves, all member banks (Wednesday series)	2,850	3,160	2,880	5,202	6,011
Total Federal Reserve Credit Outstanding (Wednesday series)	2,326	2,351	2,392	2,279	2,221

\*Preliminary, week ended March 28th.

\*\* New series.

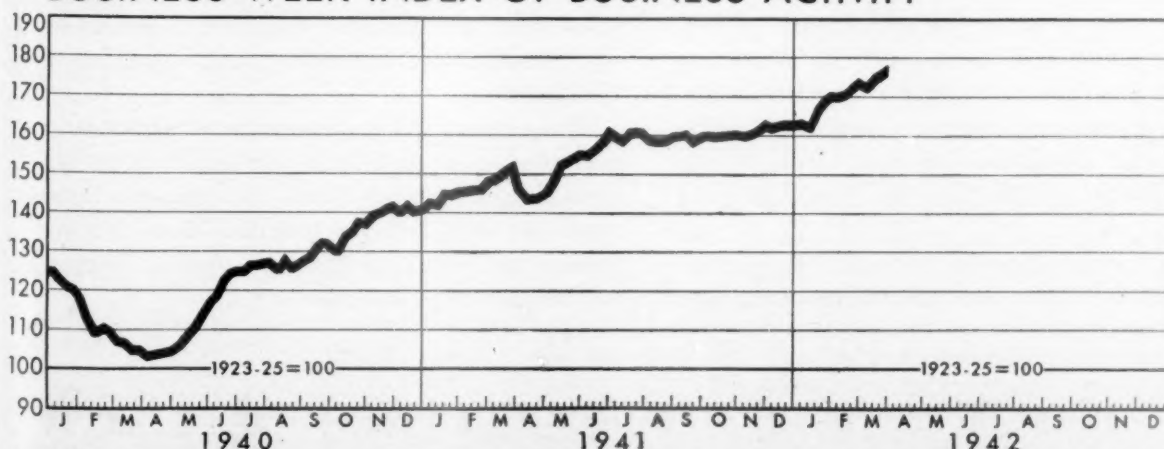
† Revised.

# Not available.

§ Date for "Latest Week" on each series on request.

‡ Ceiling fixed by government.

## BUSINESS WEEK INDEX OF BUSINESS ACTIVITY





# PUTTING THE PROPERTIES IN PLASTICS

ONE of the significant things about General Electric's self-contained plastics operation is that your product can receive the attention of experts in every phase of the business.

In a manner, it is comparable to submitting your proposed plastics part to a round-table discussion of chemists, designers, engineers, mold-makers and manufacturing men. From it can only come the plastics part that best suits your requirements.

The contribution of the chemist to the successful solution of your problem is interesting and

important. For "Putting the Properties in Plastics" is more than an alliterative phrase. It is the action taken by General Electric chemists to give your product the electrical, mechanical and chemical characteristics that its application demands.

This phase of G.E.'s operation is particularly pertinent at this time because most products, like most men, must work harder and longer in these times of war. Today's products must perform greater tasks. At One Plastics Avenue, chemists are helping them to do so.

P L A S T I C S   D E P A R T M E N T

**GENERAL**  **ELECTRIC**

# THE OUTLOOK

## Consumer Pinch Comes Nearer

Boom in Easter sales depletes the retail stockpiles and replacements will become increasingly difficult. The railroads take steps to speed traffic and avoid port congestion.

When the War Production Board this week announced stoppage of civilian output of a long list of common household appliances—toasters, waffle irons, percolators, cigarette lighters, and dry shavers—it hardly came under the head of news. Rather, it represents the continuation of a dominant trend.

The nation's production becomes increasingly divisible into two parts: war and nonwar. And war output will continue to rise sharply while civilian output declines sharply. But, in the aggregate, as *Business Week* has indicated before, production will be up. Only there will be much less for civilians.

### Ice-Box Comeback

However, the War Production Board quite clearly recognizes that people must go on living; that civilian establishments must be maintained if the war effort is to be prosecuted efficiently. Thus, this week WPB authorized manufacturers of non-mechanical refrigerators to turn out 495,000 units in the year commencing July 1, an increase of 147% over the 200,000 units scheduled for this fiscal year. (But steel is limited to 20 pounds per box.) The reason for this contrary-to-trend ruling is fairly obvious. Since output of mechanical refrigerators (except kerosene) has been halted, some provision must be made for refrigerators in new homes or as replacements for outworn units.

This suggests that in civilian life we may go part-way back to grandmother's era. We're going to have to get along without new vacuum cleaners, stokers, oil burners, and fancy stoves with thermostat controls. Mops, shovels, and broomstraw for testing cake may stage a comeback. At least WPB's ruling points in that direction; and businesses the gadget age deflated may give their owners a war-born taste of prosperity.

### The Inventory Situation

As yet, however, going back closer to nature is a prospect, rather than an actuality. The country is still living on its stockpile. Thus, Easter retail sales threaten to break all records. March 15 tax payments only cut moderately into the uptrend in consumer buying, as *Business Week* indicated (BW-Mar. 14'42, p14). Loaded with increased purchasing power and fearing ultimate

shortages, people have been buying freely—not only spring finery, but also house furnishings, jewelry and so on.

Retailers have been able to supply goods out of stocks, which have been accumulated during the last 12 months. But as replacement becomes increasingly difficult and shelves get bare, the problem of distribution will become acute. And the Office of Price Administration will no longer be able to dodge the question: To ration or not to ration? For in the not-far future, when production will be running below current demand, inventories on hand will not be sufficient to make up the difference.

This potential scarcity emphasizes the problem of price-control—especially with costs rising. OPA this week authorized

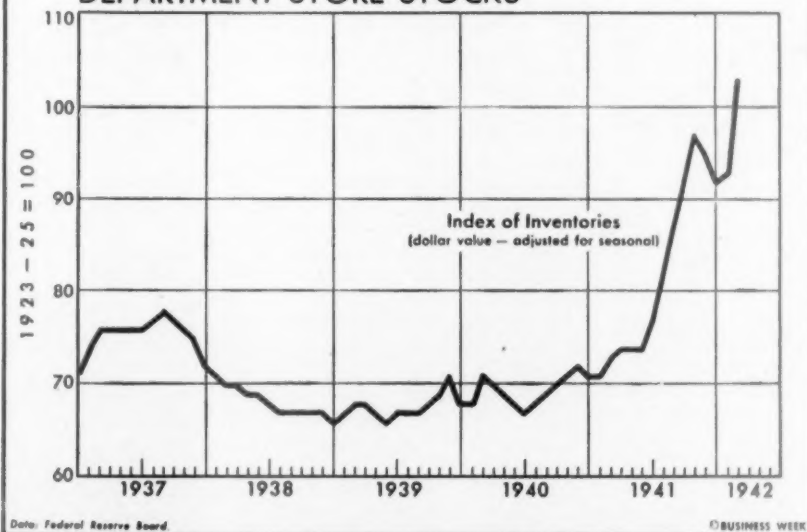
raising the gasoline, fuel oil, and coal ceilings to take into account higher transportation charges. But it took this action reluctantly and, while permitting coal dealers to add the boost in freight rates to their prices, urged them to absorb it. And to iron and steel makers, the agency offered no choice; the steel industry is expected to absorb increases in steel scrap prices. Furthermore, OPA has stated that, in cases where overall production is profitable, it will not raise ceilings on war products even if companies are turning them out at a loss.

OPA's policy is still not clear-cut. Rulings are still improvised to fit particular situations (BW-Mar. 28'42, p13). But if the Price Administration has any policy touchstone, it seems to be this: Can the seller afford to absorb the higher cost? If so, let him.

### Railroad Restrictions

Railroad transportation is now coming under restrictions. Railroads no longer will accept commercial freight traffic destined for South or East Africa or South America except by order of the

IN THE OUTLOOK:  
DEPARTMENT STORE STOCKS



People this year are going on their Easter buying spree pretty much as usual. They can—because department stores, as you can plainly see, have been building up stocks; inventories are 41% higher—in dollar value—than a year ago. But, after this, spring splurges are out “for the duration.” The armed forces are taking about 80% of new woolen cloth; 50% of cotton textiles; 25% of the nation's

leather resources, and varying (but large) proportions of such other key apparel materials as nylon, rayon, silk, etc. So department stores won't be able to replace stocks easily. Since total inventories on hand at any one time are only about 25% of a year's sales, the inference is that shelves are apt to be depleted rather quickly—once goods cease coming into stockrooms in accustomed volume.

government or the Association of American Railroads. Not only does this free car space for urgent shipments, but also it avoids port congestion.

As part of the program of easing the railroad burden, the Office of Defense Transportation this week specified minimum loads on less-than-carload freight hauls. Although l.c.l. freight represents only about 1.5% of total freight tonnage, it accounts for 14% of total box car days. The new ruling is expected to double car utilization on this traffic.

Two new operating procedures—directly the result of the war—are worth noting: The Farnsworth Television & Radio Corp. this week announced that its sales force, instead of going out after orders (which are now coming in over the transom), will be turned into a procurement division—to see that the company gets on schedule the materials it needs to produce war goods. Salesmen will visit suppliers instead of calling on customers. And Thom McAn, retail shoe chain, has adopted a two-price policy for the first time in its history. Slow-turnover, double-soled, wing-tipped models will be higher priced. Thus the company hopes to discourage demand for odd styles. The net result will be standardization and speedier production of simpler models. This is an example of private standardization in wartime without government direction.



### MOBILE TEST LAB

In order to take full advantage of wind from any direction while testing airplane engines, Boeing Aircraft Co., at its Seattle plant, has mounted a testing laboratory on wheels which run on a circular track. Designed to test thoroughly aircraft power plants without taking them off the ground, the time-saving feature of Boeing's lab is invaluable nowadays since it has eliminated considerable flight testing usually required by engineers when they are getting new-type airplanes into production.

## Tariff-Remover

**Plan empowering President to lift duties that interfere with war procurement is in line with promise made at Rio.**

After many delays, Washington is at last almost ready to introduce legislation providing for the full removal of tariffs on defense goods whenever such action will speed up procurement for the war program. A simple plan has been worked out behind the scenes and congressional leaders generally approve it. It calls for the removal of the entire duty on imports of strategic materials whenever one of the official procurement agencies in Washington can show to WPB Chief Nelson's satisfaction that this will speed up the war effort.

Actual routine will be for officials of the procurement agency to take up the question on individual items. When the WPB chief O.K.'s an application, it will be sent to the President, who under the terms of the proposed bill will have the authority immediately to remove the duty until six months after the war ends.

• **Individual Consideration**—No definition of "strategic" materials is included. Every item will be considered individually, but once it is placed on the list it will remain there as long as the law is in effect.

The plan was foreshadowed in December when the President asked Milo Perkins, head of the American group of the Canada-United States Economic Committee, to survey what legislative changes would be necessary to make possible temporary removal of duties on strategic imports (BW—Jan. 3'42, p7). Later, at the Rio de Janeiro Inter-American Conference, Latin Americans were promised some such arrangement.

• **For Immediate Action**—The experts in Washington discovered that there was no loophole in the existing legislation which would give the President the authority he desired. Only in a law passed just before the outbreak of the last war was there any room for immediate action. This old law allowed the Navy the right to repair ships abroad when necessary without paying a duty on the new parts when the ship returned home, and it was loosely enough phrased to allow goods to be brought to the United States for Navy use in a wartime rush. Insiders declare that the goods brought in under this tiny breach in the tariff armor have increased to considerable proportions.

• **Looking Ahead**—Although the pending bill limits the duty-removing power of the President to the war and the first six postwar months, the foreign trade-minded business community is sizing



### DECENTRALIZATION DOES IT

To find office space where it has never before existed is a problem faced by most communities which have become beneficiaries of the federal program of decentralization. In Kansas City, Mo., a new floor of 25,000 sq. ft. is being constructed in a display room of the Municipal Auditorium (above) to accommodate Farm Credit Administration. In Philadelphia, the swimming pool at the Penn Athletic Club has been drained for the Securities and Exchange Commission.



up probable long-range consequences.

A handful of observers, noting the increasing urgency for United States placement of long-term contracts in Latin America for some commodities no longer available from the Far East, is wondering whether it may not be necessary to continue the duty exemption on those items for the entire term of the contract, which may extend more than six months after the end of the war.

# An Antitrust Holiday?

Pact to call off prosecutions that may interfere with war effort doesn't take Arnold out of picture. He can still "tell all" on the Hill, and violators are subject to postwar action.

Antitrust prosecutions that may interfere with war production must wait.

Offhand, this joint statement of policy drafted by Attorney General Biddle, Secretary of War Stimson, Secretary of the Navy Knox, and Assistant Attorney General Arnold, with the President's endorsement, would seem to put a crimp in Trustbuster Arnold's law enforcement crusade. That's true to a degree, for the present, but concerns in Arnold's black book may discover that they haven't dehorned the devil.

• **Into Arnold's Hands**—Under the policy formally adopted, antitrust investigations or prosecutions will be deferred if either the War or Navy Department holds that action would seriously impede the war effort. Actually, this doesn't greatly change the present situation with respect to antitrust enforcement and, to the extent that it does, it seems to play into Arnold's hands. The trustbuster never could take legal action without formal authorization by the Attorney General. And the President, on his own initiative or at the suggestion of Secretary Stimson or some other cabinet member, could flag down Biddle or his predecessors any time.

In behalf of certain big contractors, the War Department has for months past brought heavy pressure on Arnold to lay off. Under the joint agreement, the War Department must put its objections in writing in the future. That will put responsibility where the responsibility lies and it's just what Arnold wanted (BW—Feb. 14 '42, p15).

• **Publicity Weapon**—A "stop" letter will restrain Arnold from taking legal action, but it may not stop him from telling all to the Truman Committee if he thinks that publicity will break a bottleneck. The Assistant Attorney General's relations with the Truman Committee have been very cordial. Last week, after concluding a consent decree with Standard Oil of New Jersey, formally terminating—for the duration at least—the company's relations with I. G. Farben of Germany, Arnold for two days running told the Truman Committee and the public at large all about this cartel "marriage" which, he charged, retarded the development of synthetic rubber in this country. By the terms of the decree, the German processes now are available for use in this country on a royalty-free basis—and Arnold claims the credit by reason of initiating antitrust action.

The general tenor of Arnold's testimony was that the policy of big cor-

porations frequently is dictated by an attitude that wars may come and wars may go, but that the corporations go on forever, and must lay their plans and conduct their business accordingly.

• **Accent on "Now"**—The Justice Department's agreement with the War and Navy Departments on antitrust policy includes a "sleeper." It bars prosecution now if it is "preponderantly clear that such action would seriously interfere with the war effort." It doesn't foreclose prosecution after the war is over for acts committed during the war without the sanction of appropriate authority (or for continuing practices after their official sanction has been withdrawn). This "sleeper" sounds more ominous than it's likely to turn out to be. Quite apparently, Arnold as a prosecuting attorney of rich, practical experience does put much store in it but the policy agreement provides for extending the statute of limitations and bills to this end were introduced this week. It may be seized upon in Congress, however, as a springboard for legislation to suspend operation of the antitrust laws entirely for the duration and/or to provide that

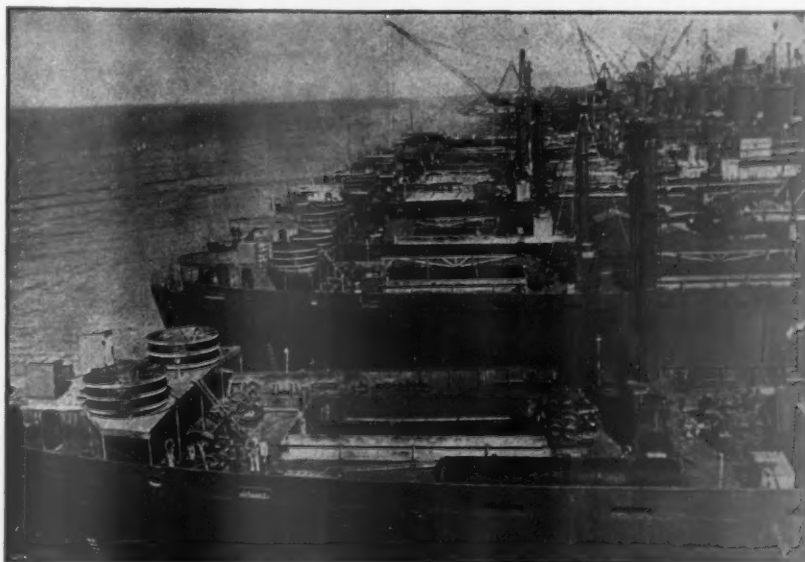
nobody shall be sued later for actions furthering the war production program which may infringe the antitrust laws.

The policy statement doesn't disturb present arrangements for clearance with Justice Department of programs involving collective action by an industry, or an industry or trade group, requested or directed by the War Production Board, Office of Price Administration, or other war agencies.

• **Precautions**—Arnold's object here is to see that such programs don't include delegation by the government agency of broad, discretionary power to an industry committee or group. He's standing guard against resurrection of the NRA. When he spots something that looks fishy in a projected course of action by a government agency he brings it to the attention of the responsible officials.

Once a project has been adopted, however, Arnold won't go behind it, and business concerns acting in conformity with appropriate authority have nothing to fear. Yet it is futile for business concerns whose proposals have been turned down by WPB or OPA to appeal to Arnold. He doesn't propose to mix into the initiation of war production, price, or rationing policies.

• **Data for Crowley**—Fertile field for Arnold's recent activity has been the conduct of firms with foreign connections and agreements covering the pooling of patents, division of markets, price-fixing, etc. He has a long dossier



## FINAL FITTING

With the brass bands, gold braid, and champagne christenings which attended their launchings now past history, an undisclosed number of sharp-prowed Liberty ships are today being fitted with machinery and equipment for cargo handling at an

undisclosed number of shipyards in the United States. What can be told is this: The shipbuilding program is on in earnest and soon scores of Liberty ships, like the nine shown above, will be ready for cargoes and trouble. Note the pair of striped drums on each ship's stern; they are gun emplacements for fighting subs, planes.

of investigations, but won't initiate any new cases. Instead, he's turning over to Leo T. Crowley, the alien property custodian, all information regarding such companies.

It will be up to Crowley to step in, terminate arrangements with foreign concerns, or cartels, or taken control of the management, just as Secretary Mor-

genthau did in the case of General Aniline & Film Corp., formerly controlled by I. G. Farben. Pending cases which involve I. G. Farben tie-ups include:

U. S. v. Aluminum Co. of America, et al., charging conspiracy to restrain trade by a patent pooling arrangement to confine production of pure mag-

nesium in this country to Dow Chemical Co., and to limit output of magnesium products to defendants alone.

U. S. v. American Magnesium Corp. (controlled by General Aniline & Film Corp.) et al., charging conspiracy to fix prices of pure magnesium and fabricated magnesium products.

U. S. v. Dow Chemical Co., et al.,

## Thurman Arnold on How to Avoid Thurman Arnold

The government's offer to suspend for the duration of the war any antitrust prosecution guaranteed to jeopardize war production (page 15) may postpone an evil day with Thurman Arnold but it leaves the most important wartime antitrust questions unanswered.

These are the questions that business men ask upon every suggestion by Washington war agencies that they get together to speed up armament production, stretch shortage materials, or otherwise push the war effort.

What will Thurman Arnold do about specific kinds of cooperation? How can companies protect themselves against overstepping that line in the Assistant Attorney General's legal mind? How can they know in advance what's "cooperation" and what's "conspiracy" according to the Department of Justice?

The chief of the Antitrust Division has been told by Business Week that these are the antitrust questions now being asked of it by executives. He has replied that he would like to answer them himself and has sent a "letter to the editor" designed to do the job.

Here—for information and for the record—is what Thurman Arnold wrote:

Business men complying with requests or directions given to them by responsible government agencies engaged in advancing the war effort need have no fear of being prosecuted for violation of the antitrust laws. Speaking generally, the enforcement of the antitrust laws is designed to assist in attaining the same general objective sought by the war agencies, which is the full use of all of the nation's productive capacity.

Misunderstanding and confusion concerning economic legislation is a barrier both to compliance with these laws and to constructive business conduct. Realizing this fact, the Department of Justice is ready to assist conscientious businessmen to understand how they may assist the war effort without violating the antitrust laws. Both the Antitrust Division and the war agencies are prepared to give advance clearance to programs which will contribute to the war effort.

The function of the Antitrust Division is to prevent private groups from using

the privileges of combination for purposes for which they were not intended. Previous wars have taught the nation that business men who come to cooperate may remain to conspire. Therefore, antitrust enforcement seeks to ensure that the emergency will not become a cloak for private schemes which injure business men and consumers.

The difference between legal cooperation and illegal conspiracy primarily depends on the purpose and the effect of the combination. Business men are free to act jointly, to pool their resources, to exchange information, and to simplify or



ANTITRUST CHIEF

standardize their products. They cannot, however, concertedly exclude other producers from competition nor force others to deal with them. The broad test of conspiracy is whether the combination is designed to restrict production, to raise prices, to interfere with distribution, or to drive competitors out of business.

For example, a number of milk companies are now pooling their resources to concentrate milk delivery. Such cooperative programs are perfectly reasonable as long as they are designed to save rubber. If these milk companies collectively advanced prices or concertedly excluded other distributors from the pool, however, the combination would become a conspiracy. A delivery pool, for instance, might provide an outlet for the brands of the major companies but not for the brands of an independent producer. In

such an event, the costs of the independent would soon become substantially higher than those of his competitors. His equipment, once worn out, could not be replaced, and he would be forced to discontinue deliveries. To collectively deprive a competitor of the right to use a joint system of distribution, would be to exclude him from the market. The Antitrust Division would view such a combination as a conspiracy in restraint of trade.

Individuals desiring formal clearance under the antitrust laws may submit their plans to appropriate government agencies for approval. In this way public authority and not private interest can determine whether specific activities promote the national aims. Business men who perform approved activities in good faith will not be criminally prosecuted by the Antitrust Division. This is not a new or novel construction of antitrust enforcement policy. In no instance in the past has prosecution been undertaken to penalize groups performing specific acts that were directed by responsible public officials.

The war agencies are in the best position to know whether proposed action is necessary for industrial mobilization. Activities under the control of the war agencies should be submitted to them for approval.

Business men are not required to submit their plans for collective action to any government agency for approval. The procedure for formal clearance under the antitrust laws is available so that confusion or misunderstanding will not be a barrier to constructive business policy.

Programs approved by the Antitrust Division and the war agencies will be terminated if they do not advance the war aims. The Antitrust Division, by means of civil action, will ask the courts to enjoin any activities which do not express the spirit of plans previously approved. These civil suits for injunction do not involve any criminal penalties. The war agencies, because of the tremendous pressure for speed, have been unable to develop safeguards against abuse of authority delegated to private groups. Misuses of such grants of authority were flagrant in other wars. They must not be repeated during the present emergency. Business men who come to cooperate must not remain to conspire away the benefits of joint action. The function of the Antitrust Division is to prevent abuse of privileges given to private groups. This has been the traditional objective of antitrust enforcement.

charging restraint of trade by pooling patents for fabricating magnesium in the Magnesium Development Corp. and preventing others from producing magnesium.

U.S. v. General Aniline & Film Corp., I. G. Farben, et al., charging division of world markets and other restraints in the manufacture and sale of film and photographic material.

U.S. v. Dietrich A. Schmitz, General Aniline & Film Corp., et al., charging division of world markets in manufacture and sale of photo printing material and apparatus.

U.S. v. General Dyestuff Corp., I. G. Farben, et al., charging restraint of trade in manufacture and sale of dyestuffs and heavy chemicals in this country and between this country and other countries.

• **Other Cases**—The government's case against Allied Chemical and Dye Corp., et al., charging restraint of trade in fertilizer nitrogen sources, control of quantities imported and prices charged, was nolle prossed (or consent decrees entered with respect to various defendants), but has nominally been set for trial of eight remaining defendants on May 4.

Also awaiting trial on an indictment returned last October are General Electric Co., Fried, Krupp A-G, et al., charged with conspiracy to restrain trade in tungsten carbide and other hard metal compositions by patent pooling, price-fixing, division of markets, etc. Trial is nominally set for June 15.

Another pending case against General Electric alleges conspiracy to restrain trade in electric lamps by a patent licensing agreement with a Netherlands firm, N. V. Philips Gloelampenfabriken. No date for trial has been set.

• **Consent Decrees**—Several cases of this general character have been concluded by entry of consent decrees:

U.S. v. Bausch & Lomb, et al., charging conspiracy with Zeiss, the German company, to restrain trade in military optical instruments.

U.S. v. Schering Corp., et al., charging allocation of world markets for hormones and preventing others from manufacturing and importing hormones into this country.

In a series of cases which have been terminated by consent decrees, Sterling Products, Inc., the Bayer Co., Inc., Winthrop Chemical Co., and others were charged with restraint of trade in pharmaceutical products, including aspirin, by agreements with domestic and foreign companies.

• **Out of Labor Field**—Labor union practices are another field from which Arnold is retiring. Biddle, his boss, has publicly rebuked Arnold for attacking unions and he admits he has been licked to a standstill in the courts in trying to hang unions by the antitrust law. He declares that he can do nothing

without legislation by Congress.

Even without cases from which he is fenced off by the war effort, without cartel cases, and without labor cases, Arnold still has a rather wide field in which to roam. His hands haven't been tied yet with respect to "fair trade" and other practices principally involving the distribution of food and drugs. Leon Henderson's Office of Price Administration is furnishing Arnold with plenty of leads and anyhow, Arnold never knows when he's licked.

## Armor Pool

Spring and bumper firm pioneers process for conversion to tank plates; now it heads an industry-wide syndicate.

Several large steel companies said it couldn't be done without special furnaces and equipment. So the Standard Steel Spring Co. went ahead and did it and, after 29 years in the auto spring

and bumper manufacturing business, is facing the most staggering backlog in its history representing orders for armor plate for tanks.

• **Big Gain in Volume**—Standard Steel Spring's biggest month as a supplier for the automotive industry was \$600,000 worth of springs and bumpers, a figure that looks tiny alongside its present operations.

A year ago its officers saw the writing on the wall, knew they would have to find new outlets for their products—or new products. Their engineers scanned the field of war implements and hit upon armor plate as best suited to their equipment and knowledge of heat-treating technique.

Preparations for the changeover were so thorough that armor plate was rolling out of the plants less than six weeks after the ax fell on auto production, and all of the output has survived the Army's rigid tests.

• **Some of the Problems**—The conversion wasn't simple. Standard Steel Spring had the heat-treating furnaces which impart the necessary hardness to steel and some of its presses were adapt-



## BIG NOISE FROM D.C.

A comparatively small air-raid siren, designed by engineers working for the Office of Civilian Defense, was conceded to be a howling, screaming success by everyone who heard it, including OCD Director Dean Landis (left), during its tryout in Washington. The soundblast, which does not resemble other sirens and whistles, is produced by forcing air (from gasoline engine-powered air compressors) through whirling metal blades. The siren rotates, and is expected to blanket an area of about ten square miles.



able to straightening operations. But the company lacked other fundamental equipment and skilled personnel to operate it.

The Army, for example, required planed and machined edges for close tolerances so that the steel plates would fit perfectly when assembled on the tank. Standard Steel Spring engineers proposed grinding the edges and welding the plates together on the tanks. Not only would this process be quicker but the resulting joints would be stronger, they held. The War Department okayed the change in specifications.

The company also needed flame equipment to cut the plates, radial drill presses to bore them, and shot-blasting to clean them. The Army cooperated in getting them.

• **Business Begins to Boom**—The first contract, for 330 sets of armor plate a month, came from an auto manufacturer which had bought Standard Steel springs and bumpers for a quarter of a century and which had turned to building tanks. The order soon was increased to 666 sets, then to 1,000, to 1,500, and finally to 2,500. Another tank manufacturer followed along with orders for vast quantities of armor plate—so great that Army Ordnance was struck with an idea: If Standard Steel Spring can make armor plate, why can't the 15 or 16 other spring and bumper manufacturers in the United States?

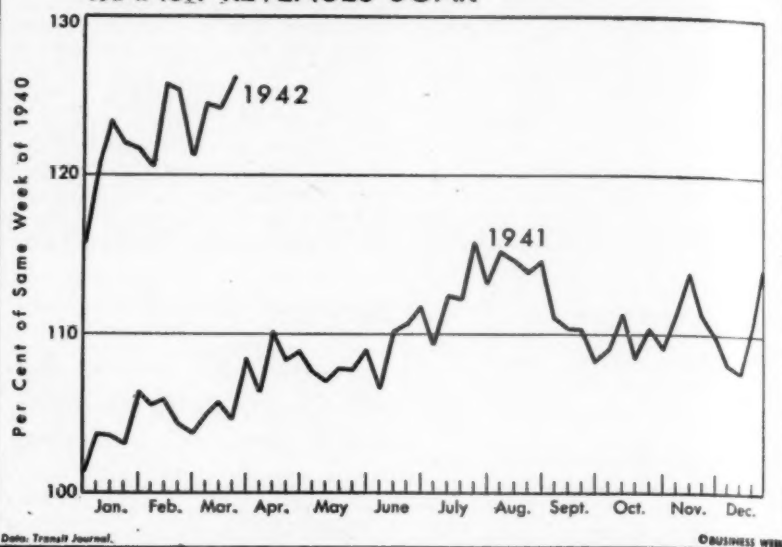
Officials of Standard Steel were called to Washington. Their conference with the facilities section of the Tank and Combat Vehicle Division of Army Ordnance was held on a Saturday. The following Wednesday the Army convened all the spring and bumper makers in Toledo, and outlined a program, buttressed with facts and figures from Standard Steel Spring's year-long study and production experience, for conversion of the entire industry.

• **Still Other Recruits**—Later a farm-equipment manufacturer and an auto-hardware manufacturer were induced to join what has emerged as a syndicate. All but one of the spring and bumper manufacturers are participating.

As described by the War Production Board, not all the participating plants are fully integrated. One plant gets the steel from the mills, flame-cuts the plates to size, and ships them to others for heat-treatment, straightening, sand-blasting, drilling, grinding, and machining. Then they are returned to the original plant to be painted, stenciled, assembled into sets, and shipped to the tank plants.

• **"Parent" Plant**—Standard Steel Spring has told the Army it is willing to assume "parent" responsibility in subcontracting to produce all the armor plate needed for M-4 and M-7 tanks. It already is fronting for the pool on several hundred million dollars worth of business.

## TRANSIT REVENUES SOAR



In each of the last 14 months, traffic volume on intracity street railway systems and bus lines has exceeded the figure for the same month of the pre-

ceding year. Recently defense demands, piled on top of limitations on automobiles and tires, have pushed the totals higher and higher.

## Trolleys Revivified

Much pushed-around city rail systems gain a new lease on life from war industrial boom and necessities of conservation.

The city railway industry, like the Brooklyn Dodgers, has learned that three strikes don't necessarily constitute an out. At the last minute, something akin to a dropped ball on third strike always has turned up to convert threatened failure into a success.

• **A Succession of Jolts**—When the automobile became popular, people began driving to work instead of standing on the corner waiting for a street car. There have been depressions, franchise problems, and rate difficulties. Finally the more versatile buses threatened to replace the street cars.

If a lifesaver was needed, however, it has come in the form of the war boom. Conservation of gasoline, of tires, and of the metals used in both buses and airplanes has been a factor. Also, the situation that made necessary such conservation was responsible for creation of armament plants far enough outside city limits so that transportation for workers was required.

These factors have brought 17% more traffic to city transit systems than a year ago, and that increase promises to swell still further. The government, therefore, has stepped in to see that

streetcars are fully utilized and that buses are available for essential needs.

Numerous cities had planned to replace rail lines with motorbuses. However, all conversions of city rail carlines to bus operations, except in extraordinary instances, are banned for the duration by the Office of Defense Transportation. To Guy A. Richardson, head of ODT's Division of Local Transport, must go appeals from cities that feel substitutions are necessary. Individual rulings will be based on how good a case is shown in regard to reasons for the proposed change, and whether equipment is available or must be procured.

Before the ODT will certify to the War Production Board that any new equipment is needed to handle expanding traffic, a city must show that present equipment is being used efficiently.

• **What It Means**—This means (1) stagger business, school, and shopping hours, to spread riding peaks (BW—Mar. 28 '42, p. 33); (2) improved regulation of street traffic to permit speedier transit vehicle operation; (3) doubled-up use of private cars; (4) encouragement of walking to work or school, and (5) discouragement of unnecessary travel.

ODT Director Joseph B. Eastman pointed out that "in most cities more than 50% of the total volume of local traffic is carried during morning and evening rush hours, leaving 50 to 75% of existing transit equipment idle during the remainder of the day," and that "so far as passenger automobiles remain available for transportation in the war effort they must be used to capacity."

# Farewell to Loans

This is the story of how a finance company was nudged into lending for conversion—and then converted itself.

Finance companies popularly are thought of as handling only intangibles except when a delinquent's car must be repossessed. But Thomas E. Courtney, the big, blue-eyed Irishman who, 18 years ago, founded the Northern Illinois Finance Corp. of DeKalb, Ill., on \$3,000 of borrowed money and ran it into its present net worth of \$7,000,000 keeps his desk cluttered with such solid items as anti-aircraft shells and tank components, machine-gun bullet cores and fuse parts.

• **Why Sit Back and Wait?**—Courtney's pet dislike is the priorities-pinched manufacturer who is waiting for what is euphemistically termed "conversion." Such folks, he says, are expecting that some military product will come along that will fit squarely into their shops, equipment, and layout. He knows from experience that such comfortable conversions simply do not happen. And, without flag-waving, he considers that any such easy-going approach falls considerably short of what can reasonably be expected of an American business man in war time.

Northern Illinois Finance Corp. is a first-rate example of converting the hard way. Likewise, it is a first-rate case study in how to keep profitably occupied even though your normal business has been shot out from under you.

• **Instalment Troubles**—The universal condition of finance companies today is one of needing business. Their nationwide volume averages about 75% of normal, and is falling away daily as contracts expire. Customers are rushing in to pay up their notes in advance of maturity, and new business is curbed both by the Federal Reserve's instalment credit rules and by the disappearance of consumers' durable goods to finance.

Courtney's office, however, has no lackadaisical aspects. Everything is humming, nobody is looking for other employment. Some of the office help is only temporarily occupied with setting up the company's plans for war production, expects thereafter to change into overalls for the duration of the war—but with the same old employer.

• **Byproduct of Priorities**—Northern Illinois Finance Corp. was nudged into munitions, way back when Americans still self-consciously called the manufacture of planes, guns, and tanks the "national defense program." It happened logically. Priorities shut down many of the small factories in the company's territory.

Consequent unemployment cut into

time sales of automobiles, electrical appliances, airplanes—even of dairy cattle. To boost payrolls in its region, the finance firm's management found itself helping small plant owners unearth Army and Navy subcontracts that they could undertake.

• **Inspection Job**—Presently it was advancing cash for the purchase of machine tools and other production equipment required for military orders, and buying accounts receivable to carry hard-pressed proprietors. This forced the company into industrial cost accounting, production planning, and a first-hand knowledge of government inspection standards, to make sure that its money



It's a long jump from instalment loans to arms production, but Thomas Courtney is making that conversion.

would turn into Treasury warrants instead of federal rejections.

Typical example: A sheet-metal fabricator, without steel to fill orders, was set up as a maker of Army foot lockers, on \$75,000 of Northern Illinois money, and kept in this business with monthly loans against his sales. Those original contracts are long since completed, and replaced with subsequent orders for military goods quite different in type, including a range of items from table tennis tables to ship bulkheads. But—this factory is still using better than \$90,000 of credit every month.

• **Some of the Jobs**—Actually, the finance company is lending at the rate of \$10,000,000 a year—about 78% of its total finance volume—to manufacturers on war orders, and is continually encouraging small plants to join the parade. Some other examples of shiftovers that it has fostered include:

Metal-sign manufacturing to ammu-

nition components. The original requirement was a few used screw machines, and it took an outlay of \$1,000 to equip the first one to turn out the product fast enough to pay.

Garage-equipment manufacturing to airplane-motor maintenance equipment. This shop had to be financed to one centerless grinder and one small boring mill, subsequently to expansions.

Machine shop to making dies for ammunition. No new equipment.

Automobile-trim repairing to specialized military clothing. The first step was obtaining a handful of double-stitch sewing machines, since expanded many fold.

Automobile dealer to bomb component. Lathes were the first requirement.

Paperboard container manufacturing to gunnery training accessories. Original machinery retained, but major alterations required to adjust to new product.

• **Courtney's Decision**—In the course of wangling contracts for his small-shop neighbors, Courtney learned his way around such lairs of the war order as the War Production Board in Washington and Chicago, the Chicago Army ordnance, quartermaster, air corps, and Navy procurement offices. Simultaneously, he became imbued with a solemn conviction that the war situation required production right then.

The consequence was that, when he heard of a subcontract for tank parts that was going begging because it looked like a tough one, he convinced ordnance officers that his finance-company engineers, cost accountants, and production men had by now so learned the ropes that he could take this contract and deliver. Thereupon, in rapid succession, he: (1) Changed the name of the company to Northern Illinois Corp.; (2) purchased a large abandoned factory building; (3) drew up a list of the machinery required for a toolroom here, and (4) when the list of production machinery and sources was received from the prime contractor, set about expediting deliveries on this equipment, including such current rarities as centerless grinders, electric furnaces, and heavy hydraulic presses.

• **Tool Roundup**—Ordnance experts said the plant should be producing on a small scale within four months. Courtney immediately instructed his firm's 32 solicitors of instalment paper to canvass every machine shop and manufacturing plant in their respective territories, to telephone daily by 5 p.m. the list of machine tools and other toolroom equipment that these concerns had for sale. Next morning, engineers arrived to inspect what looked best. Incidentally, the list then compiled has been a bonanza not only to Northern Illinois but also to the manufacturers of the district, yielding many an item that was otherwise unobtainable.

To round up the equipment which

could not possibly be found in shop surpluses, Courtney drafted the company plane and pilot previously assigned to drumming up airplane finance paper. He teamed up an engineer with these, and gave them the simplest possible set of orders: Fly to the source of the required equipment, stay there until it is obtained.

• **Presto: A Toolroom**—By this charmingly direct approach, Northern Illinois Corp. elbowed its way to the head of the delivery line. The supplier, tired of seeing Courtney's men, generally shipped them the first completed unit to get them out from under foot. Within ten days, a well-equipped toolroom for the new operation was being installed in the plant.

Six weeks after receipt of the contract, the new plant began cutting metal. As this is written, the last of the big equipment units has been received, and almost as soon as it is set the finished product should be shipped, approximately five weeks ahead of time.

• **Developing a New Machine**—Meanwhile, Courtney approached a machine-tool firm that had been tinkering with the design for a single-purpose machine which—if ever they got the bugs out of it—would turn out at a rate several times faster than was possible by the conventional technique, one small-arms ammunition item that is needed in astronomical quantities. The new tool had already consumed several thousand dollars worth of experimental work, and was still short of perfection.

Courtney was definitely interested, presently underwrote further research on the problem. After a few thousand additional dollars had been spent, the new machine was ready for a demonstration. It ran 24 hours a day for more than a fortnight, knocking out at high speed the urgently-needed ammunition parts to standard specifications. Last week the Ordnance Department was invited to have a look.

• **Bonanza for Small Shops**—When the new process is officially accepted—as the Army seems to consider practically sure—Courtney expects to introduce it as the means to employ, for the first time in the United States, the real small-shop bits-and-pieces technique that the British developed after Dunkerque. Likewise, he visualizes this as the one sure-fire method thus far advanced for saving the hides of the thousands of automobile dealers now teetering on the brink of financial collapse. Two of the major automobile makers have the same opinion, are boosting the idea enthusiastically.

He has already signed up 75 garage-men within 50 miles or so of DeKalb, has applications and inquiries from hundreds of others. He plans to put one of his high-speed machines in each garage just as soon as they can be delivered, and to put a minimum of half a dozen



## SPLIT CARTON

One solution of an old problem to jobbers—that of repacking split carton orders—is to be found in a new-type carton introduced by Rumford Chemical Works. Around the outside of the carton runs a line which may be used as a guide for splitting with a knife, obtaining two separate, complete cartons, each holding 12 cans.

in each spot when he can get them. These bits-and-pieces shops are so situated in highway loops that a set-up man and an inspector can cover them in daily trips by automobile, check each shop every two to four days as experience proves necessary, and get home each night to DeKalb.

• **For All to See**—The firm that developed the production equipment expects to deliver several hundred by midsummer, and Courtney is plugging a plan to have these special-purpose units manufactured on royalty by other machine shops, to get more and more into production.

Likewise, he is urging the Ordnance Department to allow him to stipulate that these machines be placed in the front windows of the garages using them, to manufacture ammunition right in plain sight of the populace. His theory: Even the most apathetic and unimaginative Midwestern small-towner, who might be quite unstirred by the manufacture of ship plates or radio signal equipment behind locked doors in a big plant at the edge of town, cannot miss the implications of seeing a high-speed output of something that is obviously intended for the sole purpose of drilling holes in the enemy.

## A "Sulfa" Ration

Each U.S. soldier going into combat will carry tablets of antibacterial drug, acclaimed for results after Pearl Harbor.

Coming through its first test under fire with flying colors, sulfanilamide, the first in the "sulfa" series of "miracle" drugs, has received official stamp of approval from the U. S. Army. The O.K. came in the form of a formal War Department announcement that every U. S. soldier going into a combat zone will be equipped with a spill-proof metal box containing 12 sulfanilamide tablets.

• **Planned for Several Years**—The Surgeon General's Office of the Army started letting contracts for these metal boxes (something like an aspirin box with a special method for releasing one tablet at a time with use of only one hand) several years ago.

This was done on the basis of recommendations made by a National Research Council medical advisory committee, composed of nationally known doctors who went "all out" for sulfa compounds over three years ago. Paced by such leaders in the medical profession, sulfa drugs are widely used in U. S. private practice. But it was not until all the reports were in from Pearl Harbor that the War Department made official announcement that it would issue sulfanilamide to every soldier.

• **Report from Pearl Harbor**—Crediting use of sulfonamide drugs as one of the major reasons, Dr. John J. Moorhead, New York civilian surgeon who started operating at a large military hospital near Pearl Harbor immediately after the attack of Dec. 7, stated the following in a report to the Surgeon General and the U. S. medical profession:

"(1) Postoperative mortality was 3.8%.

"(2) No deaths resulted from gas gangrene.

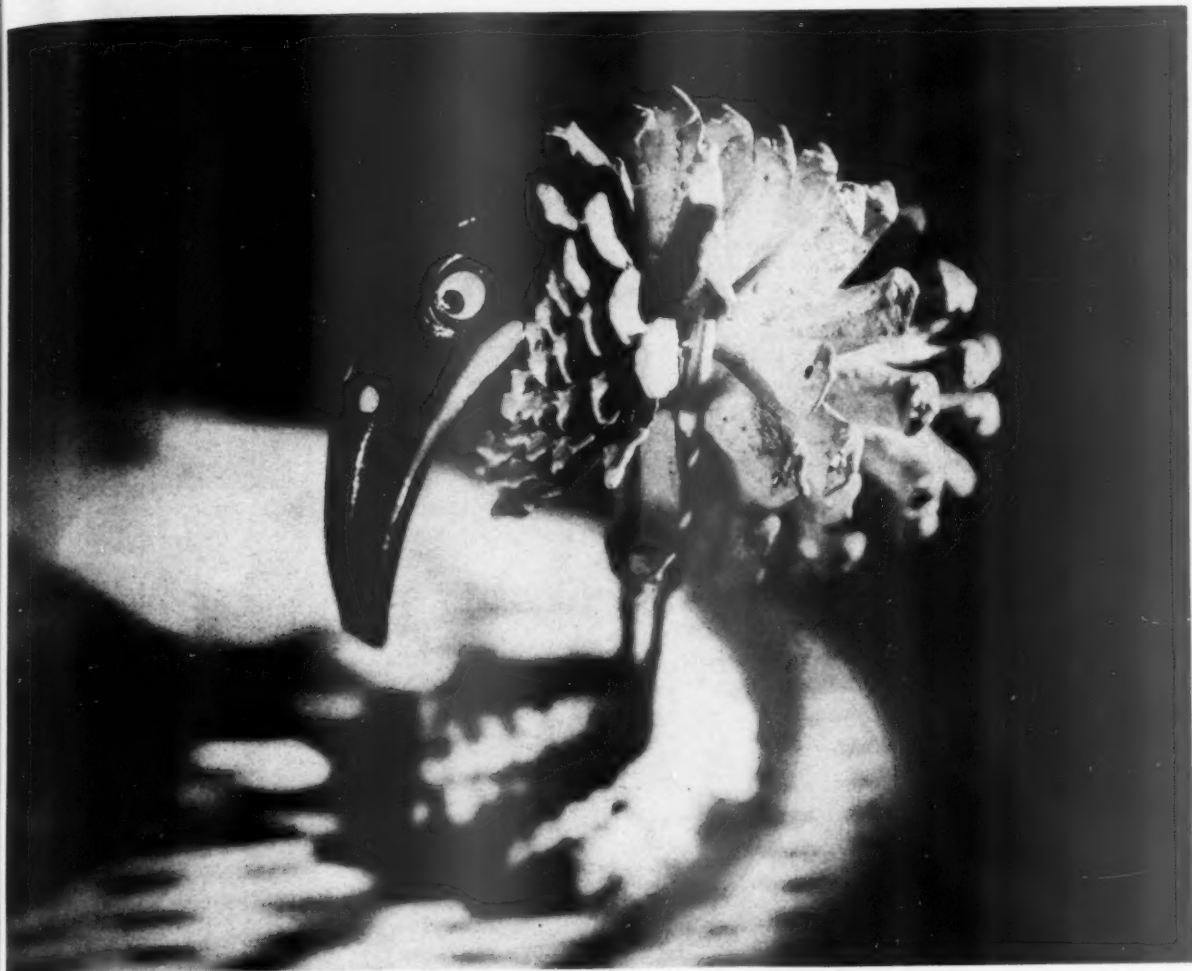
"(3) The results were better than I had ever seen during 19 months in France when serving with French, Belgian, and American medical formations."

A similar report was made earlier by Dr. Perrin H. Long, of Johns Hopkins Hospital, Baltimore, who is credited with bringing the sulfa drugs to the U. S., and who is the leading advocate of their use in U. S. medical practice.

• **Series Is Lengthened**—The sulfanilamide, which is being issued to the soldiers, is the basis for a whole set of derivatives. Sulfapyridine is the second in the series, sulfathiazole the third. Most recent additions are sulfadiazine and sulfaguianidine, which were released for prescription sale only recently by the Food and Drug Administration.

Although an accurate count is not

"Unforeseen events . . . need not change and shape the course of man's affairs"



## DO YOU BELIEVE IN THE WORRYBIRD?

The worrybird does your worrying! Place him in your home and turn your troubles over to him, the directions read.

How a motorist could tax the capacity of the worrybird! For when it falls his lot to suffer an accident, he is plagued with worries . . .

"How much am I liable for? Will my car be attached? Will I be held for lack of a bond? What other legal difficulties do I face?"

The likelihood of a judgment for heavy damages is but *one* of the hundred and one worries . . . none of which a motorist carrying a Maryland service card experiences.

A word to any one of 10,000 Maryland representatives in the United States and Canada brings a great company to his side . . . taking over every detail . . . relieving him of every worry. Maryland Casualty Company, Baltimore.

## T H E M A R Y L A N D

*Practically every form of Casualty Insurance and Surety Bond, for business, industry and the home, through 10,000 agents and brokers.*

available, reports have it that the drug industry is working on the development of hundreds of additional derivatives, all of which must go through exhaustive clinical testing before they will be released by FDA. Originally, sulfa drugs were administered via the mouth, but

more recently doctors have been injecting them and using them as powders directly on wounds. All sulfonamides attack a wide range of infections, but they are regarded as being bacteriostatic (inhibiting the development of bacteria) rather than bactericidal (actually kill-

ing the bacteria). Sulfaguanidine has the most restricted use. It is considered to be a specific for certain types of dysentery. For this reason, the U.S. has made heavy shipments of this particular form of sulfa medication to the Middle East.

## THE BUSINESS RECORD, STATE BY STATE

	Per Cent Gain or Loss 1941 Compared with 1940						Per Cent of National Total (Based on Figures for 1941)					
	Passenger Car Sales	Gasoline Con- sumption	Household Refriger- ator Sales	Ordinary Life Insurance Sales	Farm Income	Electric Power Output	Passenger Car Sales	Gasoline Con- sumption	Household Refriger- ator Sales	Ordinary Life Insurance Sales	Farm Income	Electric Power Output
<b>New England</b> .....	+12	+9	+53	+16	+15	+17	6.9	6.4	7.6	8.0	2.6	6.1
Maine.....	+4	+10	+62	+10	+8	+15	0.5	0.6	0.5	0.5	0.5	0.6
New Hampshire.....	-1	+6	+88	+18	+17	+3	0.4	0.4	0.4	0.4	0.2	0.5
Vermont.....	+16	+6	+35	+7	+17	-1	0.3	0.3	0.2	0.2	0.4	0.3
Massachusetts.....	+14	+8	+37	+14	+19	+15	3.4	3.0	3.8	4.0	0.8	2.4
Rhode Island.....	+14	+10	+100	+28	+16	+40	0.6	0.5	0.7	0.8	0.1	0.7
Connecticut.....	+14	+10	+68	+20	+14	+21	1.7	1.6	2.0	2.1	0.6	1.6
<b>Middle Atlantic</b> .....	+5	+7	+27	+10	+18	+13	20.3	17.8	23.6	27.0	7.4	24.0
New York.....	+3	+4	+23	+7	+20	+10	8.9	7.7	10.7	14.1	3.5	11.8
New Jersey.....	+6	+9	+39	+15	+18	+22	3.6	3.8	4.2	4.4	1.1	3.6
Pennsylvania.....	+6	+8	+27	+13	+16	+14	7.8	6.3	8.7	8.5	2.8	8.6
<b>East North Central</b> .....	+11	+10	+31	+11	+30	+17	26.8	22.8	24.6	22.9	19.6	23.7
Ohio.....	+10	+11	+39	+14	+30	+22	6.9	6.1	6.9	6.3	3.7	6.9
Indiana.....	+8	+14	+33	+10	+34	+22	3.3	3.0	2.9	2.5	3.3	3.6
Illinois.....	+12	+8	+18	+5	+27	+10	7.3	6.1	7.1	7.7	6.3	6.1
Michigan.....	+14	+11	+34	+19	+25	+17	6.9	5.2	5.3	4.4	2.6	4.8
Wisconsin.....	+9	+8	+41	+12	+36	+19	2.4	2.4	2.4	2.0	3.7	2.3
<b>West North Central</b> .....	+5	+7	+30	+6	+30	+17	9.5	11.5	9.4	9.3	25.4	5.9
Minnesota.....	+5	+4	+30	+1	+24	+12	2.1	2.3	2.8	2.0	4.4	1.3
Iowa.....	+1	+7	+36	+8	+28	+15	1.8	2.3	1.9	1.8	7.8	3.5
Missouri.....	+6	+10	+31	+4	+37	+45	2.7	2.8	2.6	2.7	3.4	1.4
North Dakota.....	+10	+9	+15	+4	+47	+9	0.4	0.6	0.2	0.3	2.9	0.2
South Dakota.....	+1	+6	+21	+13	+34	+3	0.3	0.6	0.2	0.3	1.6	0.1
Nebraska.....	+12	+6	+15	+7	+12	-4	0.9	0.9	0.7	1.0	2.6	0.5
Kansas.....	+7	+8	+34	+18	+46	+12	1.3	2.0	0.9	1.2	3.6	0.9
<b>South Atlantic</b> .....	+13	+16	+39	+11	+22	+19	11.3	11.6	11.1	10.1	9.1	12.5
Delaware.....	+14	+8	+38	+10	+19	+17	0.3	0.3	0.3	0.3	0.2	*
Maryland.....	+10	+16	+33	+13	+23	+12	1.5	1.4	1.2	1.5	0.8	1.8
District of Columbia.....	+3	+13	+89	+8	.....	+33	0.8	0.7	1.1	0.9	.....	0.9
Virginia.....	+28	+19	+50	+16	+25	+14	2.0	1.8	1.7	1.6	1.3	1.6
West Virginia.....	+7	+9	+41	+9	+23	+15	0.9	0.9	1.1	0.9	0.4	2.6
North Carolina.....	+16	+18	+37	+9	+40	+28	1.8	2.0	1.8	1.5	2.6	2.5
South Carolina.....	+17	+18	+48	+8	-2	+17	0.9	1.0	1.0	0.7	1.0	1.0
Georgia.....	+13	+15	+35	+9	+14	+21	1.6	1.7	1.6	1.5	1.6	1.2
Florida.....	+4	+17	+9	+11	+23	+20	1.5	1.8	1.3	1.2	1.2	0.9
<b>East South Central</b> .....	+10	+19	+30	+14	+44	+19	4.5	4.9	4.9	4.0	6.8	6.1
Kentucky.....	+8	+15	+17	+21	+29	+33	1.1	1.3	1.3	1.1	1.8	0.8
Tennessee.....	+12	+18	+33	+14	+43	+17	1.5	1.4	1.7	1.4	1.7	1.8
Alabama.....	+17	+24	+40	+14	+40	+15	1.2	1.2	1.2	1.0	1.4	3.4
Mississippi.....	+1	+18	+31	+3	+66	+110	0.7	1.0	0.7	0.5	1.9	0.1
<b>West South Central</b> .....	+8	+17	+25	+9	+34	+19	7.7	10.1	6.6	7.4	12.3	5.4
Arkansas.....	+9	+17	+28	+17	+61	+84	0.6	0.8	0.7	0.6	2.2	0.3
Louisiana.....	+15	+14	+30	+10	+17	+20	1.2	1.2	1.2	0.9	1.2	1.5
Oklahoma.....	+1	+6	+24	-1	+33	+12	1.2	1.7	0.9	1.3	2.4	0.8
Texas.....	+9	+20	+24	+12	+31	+17	4.7	6.4	3.8	4.6	6.5	2.8
<b>Mountain</b> .....	+4	+9	+24	+4	+27	+8	2.9	3.8	2.6	2.5	6.4	5.5
Montana.....	+3	+9	+28	-4	+36	+23	0.5	0.6	0.3	0.3	1.3	1.3
Idaho.....	+6	+9	+12	+1	+27	-3	0.4	0.4	0.4	0.3	1.1	0.7
Wyoming.....	+12	+13	+39	+11	+17	+18	0.2	0.3	0.1	0.2	0.6	0.1
Colorado.....	+1	+6	+27	+4	+20	+8	0.7	1.0	0.7	0.8	1.5	0.5
New Mexico.....	+2	+6	+6	-2	+17	+17	0.3	0.4	0.2	0.2	0.6	0.2
Arizona.....	+6	+16	+28	+6	+40	+4	0.3	0.5	0.3	0.2	0.7	0.9
Utah.....	+4	+10	+30	+14	+32	-2	0.4	0.4	0.5	0.4	0.5	0.3
Nevada.....	+8	+14	+24	+5	+24	+3	0.1	0.2	0.1	0.1	0.1	1.5
<b>Pacific</b> .....	+14	+16	+22	+17	+32	+16	10.1	11.1	9.7	8.8	10.4	10.8
Washington.....	+26	+16	+21	+23	+40	+15	1.6	1.7	1.8	1.5	1.7	2.7
Oregon.....	+21	+16	+31	+14	+30	+67	1.1	1.1	1.0	0.9	1.3	1.8
California.....	+10	+16	+21	+16	+31	+7	7.4	8.3	6.9	6.4	7.4	6.3
<b>United States</b> .....	+9	+11	+31	+11	+29	+16	100.0	100.0	100.0	100.0	100.0	100.0

\* Less than 0.05%

## How persistent should a life insurance agent be?



IN 1882

**"HOW PERSISTENT** should I be?" is a question that plagues every conscientious life insurance agent.

Years ago, it was much harder to answer that question than it is today, for the agent's efforts to sell life insurance met with more resistance. Even now, however, it remains a problem.

► For example, perhaps an agent is trying to sell a policy to a man who has a wife and two children but little or no life insurance. He isn't much interested. The agent visits him several times, but each time he says, "No!"

Should the agent cross this head of a family off his list? Should he give up trying to persuade him that his family needs some life insurance? Or should he call again?

► If the agent does try again, this man whose family really *needs* protection might say, "Tell that agent I don't want to see him again. I'm not interested... he's wasting his time!" On the other

hand, the next call might be the time when he would say, "Yes."

► Suppose the agent makes that next call—and receives the answer, "Yes." Then suppose something happens. The family of this new policyholder will not be left without funds and the widow will not have to depend on relief or relatives, or go to work, or take the children out of school.

Many seasoned life insurance agents have had such an experience—and it is a lesson they never forget. It explains why

conscientious agents, like crusaders in every good cause, are loath to take "No" for an answer. It explains, too, why many Americans have the life insurance they now own; some agent, through repeated calls, helped them to buy the kind and amount of life insurance they should have.

► Every life insurance agent knows that there is one group of people who never criticize an agent for being too persistent. They are the beneficiaries of the men who finally said, "Yes."

COPYRIGHT 1942—METROPOLITAN LIFE INSURANCE COMPANY

*This is Number 48 in a series of advertisements designed to give the public a clearer understanding of how a life insurance company operates. Copies of preceding advertisements in this series will be mailed upon request.*

### Metropolitan Life Insurance Company (A MUTUAL COMPANY)

Frederick H. Ecker, CHAIRMAN OF THE BOARD

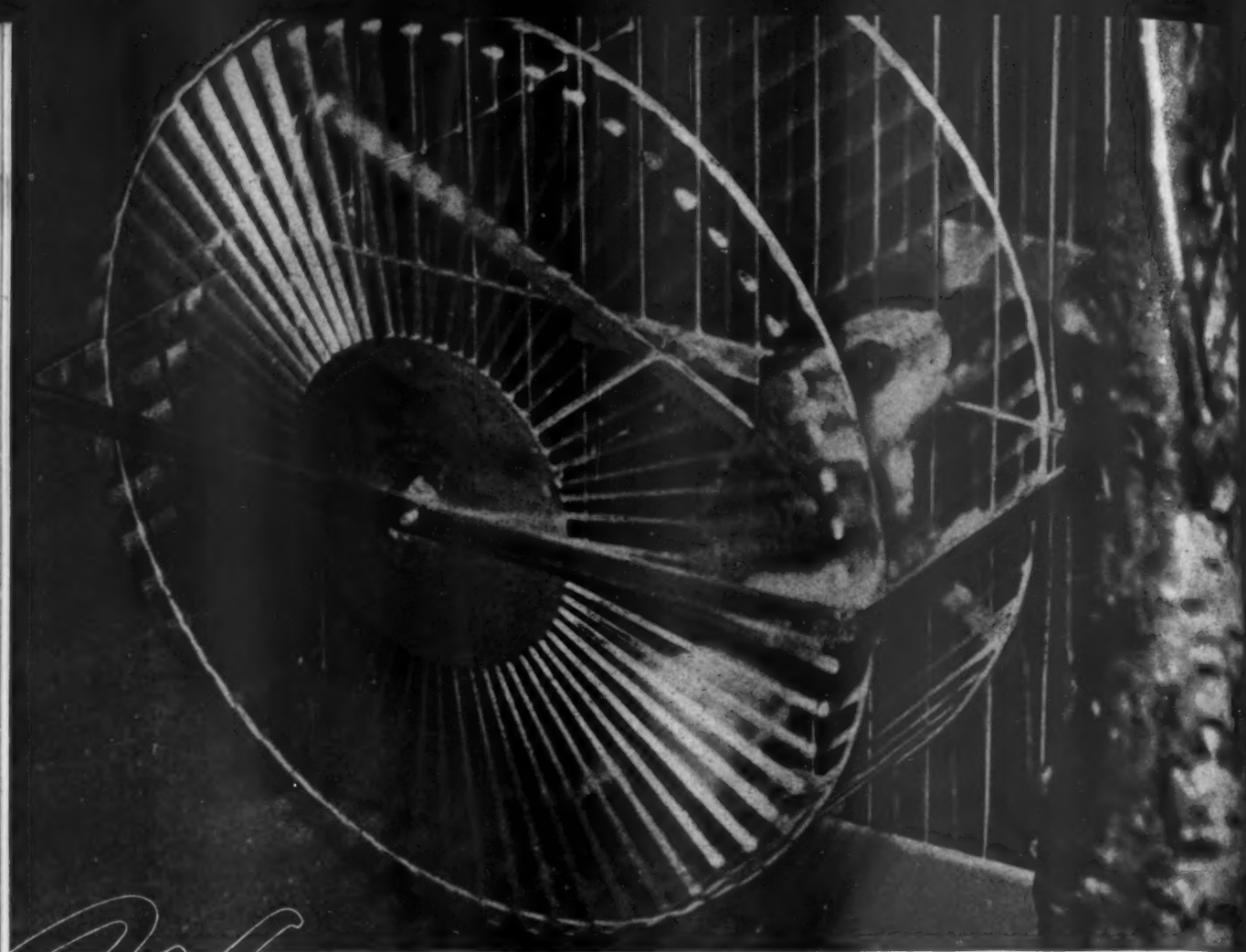
Leroy A. Lincoln, PRESIDENT

1 MADISON AVENUE, NEW YORK, N. Y.



IN 1942

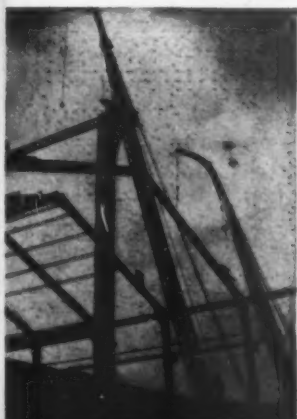




# *Wanted* ... SPEED WELL DIRECTED

## **How the Austin Organization Saves Time in the Design and Construction of Modern Plant Facilities**

A lively squirrel in a revolving cage might be likened to the height of misapplied speed and energy, yet it can be easily demonstrated that speed and energy well directed, can accomplish wonders.



Whether it is machining precision parts, erecting building steel or welding steel armor plate, skill usually means the experience and energy to produce more—in less time.

**TIME SAVING IS NO ACCIDENT**—Saving of time in the design and construction of industrial plants and facilities doesn't just happen. Adding more men and more equipment will not always speed results.

But when you concentrate the vision and energy of *experienced engineers* who know industrial problems from long and intimate contact and a *veteran construction organization* long familiar with the squeal, smoke and sweat of throbbing industry—speed and energy become well directed.

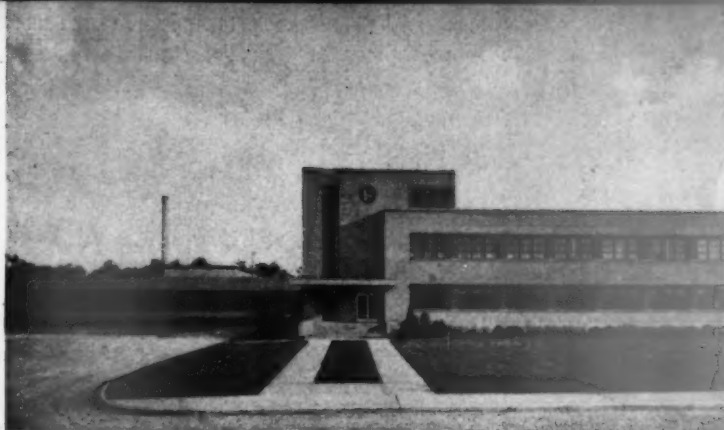
OW OW  
alization  
neering  
you h  
possibil  
to sp  
Whether  
addition  
t or at  
Sugge  
ished  
rest off  
a wheat field  
nce for a by  
aveling bri  
to 15-ton b

YORK  
DELPHIA  
BURGH  
LAND  
CIT  
NAPOLI  
GO

**OWNER BENEFITS**—When you carry this realization a step further and co-ordinate the engineering and the construction within one organization you have the Austin Method of Undivided responsibility which gives an Owner a powerful impetus to speed results.

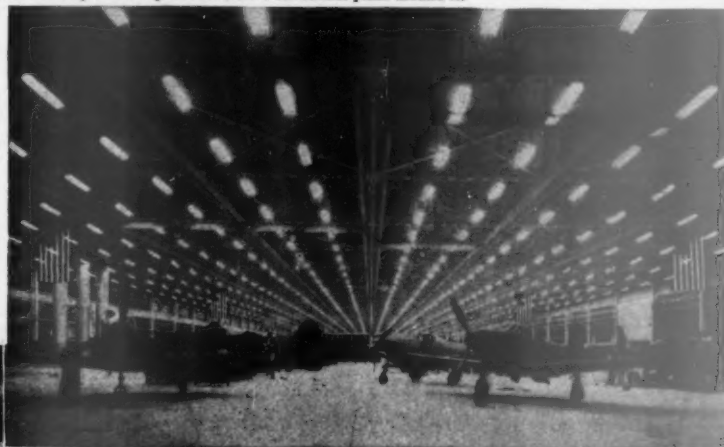
Whether you contemplate a complete new plant or addition to your present facilities, at your main plant or at a distant point, Austin is prepared to help. Suggested designs and cost estimates will be furnished without obligation. Simply contact the nearest office listed below.

On a wheat field site to a complete new plant in 80 working days . . . was Austin's performance for a hydraulic press manufacturer in Ohio. Assembly aisle shown is served by traveling bridge cranes of 50-ton capacity each. Heavy machine aisle at left is served by 15-ton bridge cranes. A 2500-ton capacity press is shown in the foreground.



This modern, functional plant in Indiana for the production of electrical control switches, comprises a one story monitor type factory, an engineering department and a two story administration building. Original units and recent expansion designed and built by Austin.

Night view in new assembly plant of aircraft producer who started with a cannon and built a ship around it . . . result, a cannon on wings. Austin started with the production layouts required for this ship and designed and built a functional plant around it.



## THE AUSTIN COMPANY . . . DESIGNERS, ENGINEERS AND BUILDERS

16112 EUCLID AVE. CLEVELAND, OHIO

NEW YORK . . . 19 Reclar Street, Whitehall 4-6393  
 PHILADELPHIA . . . 1802 Girard Trust Bldg., Rittenhouse 8670  
 PITTSBURGH . . . 332 Union Trust Bldg., Atlantic 3877  
 ST. LOUIS . . . 16112 Euclid Avenue, Glenville 5400  
 CHICAGO . . . 2842 West Grand Blvd., Madison 8874  
 INDIANAPOLIS . . . 206 Home-Monroe Bldg., Riley 1082  
 ST. PAUL . . . 510 N. Dearborn Street, Superior 6100



ST. LOUIS . . . 1198 Arcade Building, Main 1058  
 HOUSTON . . . 1616 Second Nat'l Bank Bldg., Capitol 1676  
 SEATTLE . . . 877 Dexter-Horror Bldg., Elliott 5450  
 OAKLAND . . . 1924 Broadway, Highgate 3423  
 LOS ANGELES . . . 777 E. Washington St., Richmond 2231  
 The Austin Company, Limited, TORONTO, CANADA,  
 Metropolitan Bldg., Elgin 1615

WASHINGTON, D. C., 1130 Barr Bldg., Republic 3638

# Car Dealers Tarry

Changeover to other work hits many snags, besides which it's hard to quit the richest of all merchandising fields.

Converting automobile dealers to other lines of work is proving a tough problem. It's no cinch to find something else for them to sell, there are mechanical problems in the way of most of them turning to manufacturing, and there is natural resistance to leaving the best money-making line in the entire merchandising field.

• **Some Examples**—There have, nevertheless, been some notable examples of conversion to war work. Cyrus McCormick, price executive of the Office of Price Administration's auto and truck section, cites a variety of instances, ranging from individual dealers changing over to subcontracting that needed little tooling and scant skilled labor, through a number of city pools, to precision-tool conversion. His "30 actual cases" are dotted all over the country, yet mark no more than a beginning of the job.

Organized study of the problem of finding new profit opportunities for dealers has been conducted by factory sales organizations on a national basis, but each likely possibility has met the same obstacle—priorities are hampering the manufacture of things the dealers are capable of handling. Most such articles are made of metals—refrigerators, household appliances, radios, oil burners—and as a consequence are either curtailed sharply or banned altogether.

• **Only a Few Step Out**—Dealers, of course, have turned to other lines in scattered instances. Bowling alleys, skating arenas, training schools for war trades, restaurants—even the sale of blackout materials—are ventures in which a few of the nation's 44,000 dealers are trying to make a living. But on the whole the dealer body is not interested in the small-change opportunities which have recently excited public interest. The prime question with dealers today is:

"Will we be allowed to sell 1942 cars and trucks under authorized quotas?"

That is where the main profit opportunity for dealers lies if local rationing boards can be made to step up authorizations for purchase certificates to keep pace with the rate of sale allowed by the national government.

• **Pep Talk, But Little Action**—Subcontracting of war materials by dealers' repair shops is a topic that has been much overplayed for morale and publicity purposes. Cyrus McCormick of OPA asserted that production of war materials will keep from 5,000 to 10,000 dealers



## SULICZ'S LATHES

When he learned that his employer, Pullman-Standard Car Mfg. Co., was unable to get delivery as anticipated on new lathes for rough-boring trench mortar tubes, Felix Sulicz (above, right), a foreman who was an arms builder for the same company during

the first World War, recalled three obsolete lathes from the scrap heap and rebuilt them. Within five months he was watching the "home-made" machine tools turn out mortar tubes in mass production. In addition to mortars, the Pullman-Standard line of war products includes tanks, shells, howitzer carriages, and airplane parts.



in business and give them an important role in the war effort.

Simultaneously, a motor-car manufacturer publicized the results of a "survey" showing that dealers have an enormous potential in plant, equipment and trained labor which could be employed upon war production. Later the company told dealers privately that the subcontracting idea was a mistake, but that officials would continue to study the general problem of how to help dealers.

• **Many Drawbacks**—There are instances, of course, where well-equipped dealers are aiding prime contractors for war materials. Nevertheless, opportunities are highly restricted because of lack of engineering skill, machine types, gages and production know-how.

Dealers are trying to keep in the black by developing the service end of the business. An all-time record was established in January for service work, but

there are strong reasons why volume will dwindle. Automobile use is declining, gasoline rationing will cut car miles further, war jobs and the draft will take mechanics. Car owners with poor rubber won't make normal expenditures for service if they foresee early tie-up of personal transportation. Best evidence of this is the increasing number of vehicles with crumpled and torn fenders, dented bodies, smashed bumpers.

• **Fight to Hold Dealers**—Estimates of the number of dealers who will be forced out of business by the end of 1942 range up to 80%. So far, cancellation of franchises by new-car dealers has not been of important proportions. But to prevent a landslide, factories are developing dealer-aid policies.

General Motors took the lead by offering to buy back 1942 cars, late model accessories, and parts (BW-Mar.14'42, p79). Monthly cash advances up to \$10

# WHY 9 OPERATIONS ?



Harden parts  
in **ONE**  
SIMPLE  
OPERATION



Courtesy of General Electric Company

## with this new heat-treating process!

Schedules for hardening machine parts often call for these 9 operations: Haul, copper-plate, haul, locally remove copper, haul, pack, carburize and harden, haul, straighten. And often more.

Now, with the revolutionary new TOCCO machine, hardening can be cut to *one simple, high-speed, electric operation*—a push-button start with the entire heating and quenching job *controlled automatically*, precisely—completed in seconds, formerly hours. *Doesn't require skilled labor.*

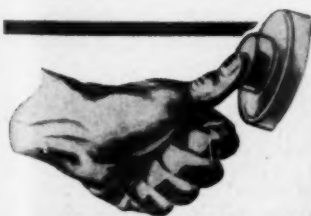
*Compact, clean and cool*, the TOCCO machine can be spotted right in the assembly line to eliminate hauling. It is *standard*—can be adapted to peace-time jobs by simply changing work fixture.

Faster heat-treating and fewer operations mean greater production! Users report TOCCO increases output 200% to 600%.

Find out how TOCCO can increase your heat-treating production!

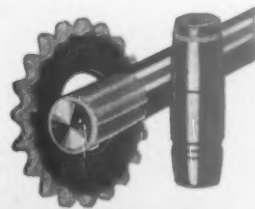
**THE OHIO CRANKSHAFT COMPANY**  
Cleveland, Ohio

SPEEDY ELECTRIC HEAT IS GENERATED WITHIN  
THE SECTION TO BE HEAT-TREATED



# TOCCO

World's Fastest, Most Accurate Heat-Treating Process



a car for every month up to March, 1943, are offered dealers by Nash. The government freezing order, according to the latter producer, is costing dealers from \$3 to \$10 a car each month for storage, financing and insurance.

Nash opposed car-repurchase plan, because these would put the dealer out

of the new car business and deprive him of a profit. Money will be loaned to dealers through finance companies and Nash will pay the interest.

Auto companies feel that two suggested new merchandising propositions may eventually have some merit in certain regions. The farm-feed business

appears to offer rural dealers an opportunity to make expenses, and sale of bicycles in defense areas may become popular. Although production of two-wheelers is currently restricted to 42% of 1941 production, the government is considering plans to allow production of four to six million cycles per year.

## WAR BUSINESS CHECKLIST

### Washington's Significant Orders on Materials and Prices

• **Office Supplies**—Revision of Rationing Regulation 4 makes available for rationing new as well as used typewriters held in the stocks of independent distributors. New or used standard typewriters will be rationed only to military construction contractors and to manufacturers of listed types of munitions and industrial machinery.

New or used portables will be rationed also to newspapers, periodicals, radio newsrooms, government corporations, local governments, selective service and rationing boards, defense councils and OCD volunteers, ship radio operators, and any establishment operating under an A-5 or better rating. Anyone may rent a new or used machine, portable or standard.

Wide-carriage typewriters are now included under the restrictions governing typewriters rather than those covering office machines (which are sold only on A-9 ratings). Shorthand writing machines are not included under either.

Use of iron and steel in manufacture of office supplies such as paper clips, thumb tacks, pencil sharpeners, and various desk accessories are cut, using 1940 as the base period, by Order L-75. Use of critical nonferrous metals and rubber in such products is banned.

Typewriters, business machines and office furniture may not be bought under the rating granted by the repair and operating supplies order, P-100.

• **Household Appliances**—Retail prices are temporarily frozen at Mar. 19 levels on the following items by Temporary Regulations 12, 13, and 14—washers and ironers, stoves and ranges, radios, and phonographs. Price Regulations 110 and 111 freeze prices of mechanical refrigerators and vacuum cleaners at the manufacturer's recommended retail price. Models not having such a price are frozen at Feb. 2 levels.

Amendment of Order L-5-b permits dealers to sell their stocks of electric refrigerators freely and distributors to sell to dealers in proportion to 1941 sales.

• **Autos**—Station wagons, ambulances, and hearses have been transferred from OPA's auto-rationing system to the truck-rationing procedure of the Office of Defense Transportation. Army and Navy will get all station wagons.

• **Lamps**—Production of lamps and shades is limited by Order L-35 to 70%

of the 1940 rate until May 1 and to 60% thereafter. After Apr. 23, iron and steel may be used only in specified parts of lamps, and no other metals may be used except for sockets, switches, plugs, and cords.

Flashlights and batteries, by Order L-71, may contain no aluminum, crude rubber, nickel, tin, or brass or copper except in electrical fittings.

• **Outboard Motors**—Manufacture of outboard motors is forbidden by Order L-80 except on defense orders. Replacement part manufacture is limited to 75% of the 1941 rate.

• **Signs**—Use of metal in signs of more than 36 square inches is forbidden after July 1. Meanwhile, it is cut to 50% of the rate during the year ended June 30, 1941.

• **Food**—Food manufacturers (according to Order M-118) may not use more honey in any month than they used in the corresponding period of 1941, except that they may use at least 60 lb. a month. Inventories over 1,200 lb. must be reported to WPB.

• **Building Materials**—Use of iron and steel in the manufacture of metal plastering bases and accessories is cut by Order L-59 to half the 1940-41 average for large producers and 75% for small. Use of zinc is cut to 35% and 50%. Production on orders placed by federal war agencies and lend-lease is exempt.

Metal windows may be manufactured only on A-2 or better preference ratings.

• **Cans**—Use of enamel on the outer surface of the end of cans is forbidden by Order M-108, except to protect a label which cannot be put elsewhere, on cans of electroplate, blackplate, or untinned metal, or on government orders.

Canners and can manufacturers may acquire inventories of boxes without regard to existing inventory restrictions, according to M-113.

• **Rubber**—Use of reclaim rubber is forbidden by amendment of M-15-b except in the manufacture of specified quantities of listed shoe parts, hose, friction tape, and erasers, and during April (and afterward to the extent authorized by WPB) in a longer list of items, including specified automotive and machine parts, stamp pads, plumbers' suction

cups, crutch tips, adhesives, barrel linings, and brush setting compounds.

• **Machine Tools**—Amendment of Order E-1-a excludes drill chucks from the types of chucks governed by the order.

• **Aluminum**—Producers and basic fabricators of aluminum and magnesium are granted an A-1-j rating (under Order P-120) on their repair, maintenance, and operating supplies. Ratings of A-1-a and A-1-c are also available to repair or avert breakdowns, but suppliers able to fill these orders out of inventory may only extend such emergency ratings as A-1-j's.

• **Other Metals**—Use of chromium in manufacture of roofing, ceramics, soap, and glass is forbidden by Order M-18-b. All chromium uses other than metallurgical and refractory are held to the rate for the year ending June 30, 1941, except that certain specified uses are more strictly limited.

• **Petroleum**—Maximum prices of gasoline, distillate fuel oils, and residual fuel oils have been raised 4¢ per gal., 0.4¢ per gal., and 20¢ per bbl. respectively in seventeen eastern states by amendment of Schedule 88.

• **Utilities**—Revision of Order P-46 raises to A-2 the rating granted utilities on repair, maintenance, and operating supplies for power or pumping plants and A-5 for other parts of the system. An A-5 is also granted for materials to extend service to war plants or projects other than housing with A-5 ratings.

• **Transportation**—Minimum weight limits of 6 tons are imposed on loadings of cars containing civilian less-than-carload freight by the Office of Defense Transportation in Order No. 1. The limit will be raised to 8 tons July 1 and 10 tons Sept. 1. If insufficient merchandise is available to bring a car up to weight in 36 hours, traffic must be diverted to another carrier, disregarding bills of lading.

• **Other Priority Actions**—Manufacturers' inventories of unit heaters and ventilators, convectors, and blast heating coils have been frozen and may be distributed only as directed by WPB.

• **Other Price Actions**—Standard newsprint prices are frozen at \$50 a ton for 60 days by Temporary Regulation 16.

# A "SAFETY HELMET"—to protect your freight



## DURYEA *Cushioned* CARS safeguard goods from the damaging "tackles" of high-speed rail transportation

Nowadays, freight is always in a hurry—and jolts are bound to occur when trains are coupled, started or stopped. These bumps often cause damage to lading. A loaded freight car, coupling at only 5 M.P.H., hits with the force of several hundred All-American tackles! Your goods need Duryea protection.

### How DURYEA Saves and Serves

With Duryea-equipped cars you save on packing and bracing costs, and your shipments arrive in A-1 condition. The Duryea Underframe gives double protection from smacks. Floating center sills let the car ride over each shock; giant springs further lessen the impacts.

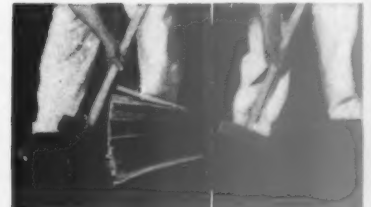
An ordinary draft gear (the old-style "buffer" on freight cars), has only  $\frac{1}{3}$  the shock-absorbing capacity of Duryea gear, and may often stick or go solid. Duryea always functions at full efficiency. In 15 years no Duryea Cushion Gear has ever needed replacement.

Cost of Duryea gear has been reduced so that it now compares favorably with conventional construction. Further, it produces continual savings in reduced packing expense, lower maintenance, permits faster handling, keeps cars rolling.

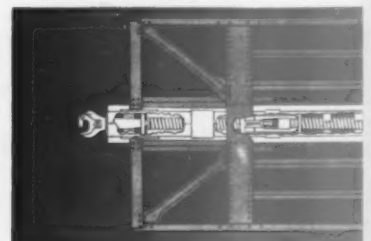
Write for illustrated booklet

O. C. DURYEA CORPORATION,  
30 Rockefeller Plaza, New York, N. Y.  
Field Building, Chicago, Ill.

Wham! A football player, tackling a runner head on, gets up unharmed, thanks to his protecting helmet. Duryea Gear enables shipments to take smacks without damage.



**ONE SMACKS! ONE SLIDES!** Photo shows how Duryea floating sills lessen shock. Left: Block of wood (sill) against wall will crack when hit with sledge. Right: With spring allowing block (sill) to slide, even hardest blows won't cause damage.



**PHANTOM VIEW** shows how giant spring and floating center sills cushion each wall lops, protecting car and contents. A Duryea installation lasts for the entire life of a car.



**RAILROAD MEN!** Duryea-Cushioned Cars reduce maintenance costs and damage claim. Duryea gear costs little, pays for itself quickly. Investigate for your road—today.

## DURYEA *Cushion* UNDERFRAME For Freight Cars

THE MODERN SAFEGUARD FOR SHOCKPROOF SHIPPING



## FIND OUT WHAT DICTOGRAPH CAN DO FOR YOU!

**N**EVER before in the history of the world has Time been so important. To the world of industry comes realization of a new era—the era of speed and more speed!

That is why you owe it to yourself to see what DICTOGRAPH can do for *you*! To see how it can save you, and key men in your organization, valuable *hours* every day! For DICTOGRAPH speeds you in a few seconds right to the department or person you wish to speak with. It relieves the jamming of interior telephone switchboards. It enables you to speak with many people in privacy *at the same time* . . . without anyone leaving his desk! It literally puts your entire organization at your fingertips! For with DICTOGRAPH you can *snap* the entire pat-

tern of your office into "high-gear."

And DICTOGRAPH saves you *money*, too! Not only in time saved by yourself and other high-salaried executives; but it cuts down interior telephone costs—also saves expensive time when you need information quickly while talking on the long distance telephone.

### Hand-tailored to your needs

Every DICTOGRAPH installation is tailor-made . . . *personalized* for your own needs *now* . . . and with an eye to the future! That is why we urge you to send for the complete, illustrated booklet which explains DICTOGRAPH in detail. See what it can do for you! Have your secretary send the coupon *now*, while you're thinking about it! No obligation, of course!

DICTOGRAPH SALES CORPORATION  
Dept. 562, 580 Fifth Avenue, New York City

Yes . . . I'd like to know more about Dictograph. Please send me your booklet which tells all about it.

Company name \_\_\_\_\_

Street address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

Name \_\_\_\_\_ Title \_\_\_\_\_



## Oil on the Bush

Castor bean a favorite of Farm Chemurgic Council, which is intent on providing industry with import substitutes.

After eight years of plugging for national self-sufficiency in all essential materials that can be grown in this country's varied climates, the National Farm Chemurgic Council last week in Chicago permitted itself the luxury of very few I-told-you-so's. Three days of business sessions were almost entirely devoted to discussion of ways for American farmers and chemists to provide things urgently needed by industry.

• **Fats and Oils**—Heading the list in importance is fats and oils. In 1940 the U. S. produced about 85% of its total fats and oils. Consumption was nearly 10,000,000,000 lb. Of this total, 67% went into food products, 20% into soap, 8% into paints, 5% into miscellaneous products.

Edible oils present only minor problems, because these can be provided domestically by feeding hogs fatter than usual, and by meeting Secretary Wickard's request that farmers boost their output of peanuts to 250% of the 1941 crop, soybeans to 150%, and flaxseed to 133%.

• **Industrial Gaps**—Critical oils are those relatively few imported vegetable materials which fill specific industrial uses, hence in short supply leave gaps in the industries that rely upon them. For instance, delegates at the convention were discussing a reported offer by several large soap companies to back any farm program that could supply a replacement for palm oil. Particular virtue of this material is its richness in lauric acid, which makes suds. Coconut, palm kernel, and babassu oils also contain lauric acid, but there is not enough of these oils to go around either.

To back up platform claims of special-oil shortages, speakers offered figures on U. S. 1940 imports of the larger-volume oils. These are:

Oil	Millions of lb.	Principal Sources
Coconut	758	Philippines
Palm	227	East Indies and Belgian Congo
Linseed	225	Argentina, Uruguay
Castor	107	Brazil, India
Tung	97	China
Olive	80	Mediterranean
Babassu	63	Brazil
Oiticica	15	Brazil
Palm kernel	13	East Indies, Malaya
Rapeseed	13	Japan, Argentina
Cottonseed	12	Brazil
Perilla	11	Japan

• **Castor Oil**—Castor oil could readily be supplied from domestic sources, once U. S. farmers accept it as an everyday crop. In 1918, the southern states pro-

duced 250,000 bu. of castor beans. Agricultural experiment station findings are that this crop can be most successfully raised in the area just north of the cotton belt and just south of the corn belt—about the latitude of southern Illinois.

Agricultural engineers, including those of International Harvester Co., say that mechanical harvesting and threshing of castor beans has advanced to a workable stage, even though there is plenty of room for improvement. The Department of Agriculture has set up its plan to increase seed stocks of castor beans, will plant 8,250 acres this summer in three varieties—Conner, Daughy 11, and Kentucky 38—to yield 4,000,000 lb. of seed for use in 1943 plantings.

• **Soybeans and Paint**—Widely considered the most aggressive advocate of tung oil paints has long been the O'Brien Varnish Co. of South Bend, Ind. O'Brien's director of research, M. F. Taggart, told the chemurgists that despite the long-standing belief that soybean oil was not worth a hoot as a paint oil, tank cars of it are daily going into the best grades of paint, that paints with high soy-oil content are giving excellent service on thousands of buildings.

Dr. Paul J. Kolachov, of Joseph E. Seagram & Sons, Inc., has for years been chemurgy's high priest of the exotic herbs. He has long urged American farmers to produce crops for such flavoring purposes as anise and licorice, has more recently been in the headlines for his advocacy of kok-sagyz, Russian rubber-bearing dandelion.

• **Seed from Russia**—At the convention banquet it was announced that the State Department had promised ample Russian seed for a sizable acreage of kok-sagyz this year in California and in the Texas Panhandle.

At this conference, Kolachov was plugging specialty crops to produce quick-drying oils, industrial materials, and pharmaceuticals. Perilla, he pointed out, has been used in ornamental gardens in this country, and plants which have escaped from cultivation have been found growing wild in states from Missouri and Tennessee to the Gulf of Mexico.

• **Rapeseed**—Rapeseed oil, said Kolachov, is needed in a dozen major uses including electrical insulating enamels, paints, special cements, special-duty lubricants, woolen-mill supplies, steel-hardening reagents, defoamer in sugar-making, plastic molding, rubber substitutes, and soft soap. It has been grown on a small scale in the cotton states and as far north as Minnesota, Wisconsin, and Michigan.

More Kolachov recommendations: Eucalyptus groves for California and Florida, not only for drug uses but also to produce antiknock material for gasoline; camphor plantings for all of the U. S. east of the Mississippi and no far-

ALL YOU NEED IS



## Build your own small cranes!

Do you need Swinging Bracket Jib or Bridge Cranes to increase the usefulness of your electric or hand hoists? You may have them, today. With a 'Budgit' Crane Assembly, an I-beam, a wrench and an hour's time, you can build the cranes yourself. No machine work. No drilling.

This radically new method of buying small cranes saves money, avoids transportation costs, and best of all, you do not lose a single day waiting for delivery. You can use your crane the day you receive the 'Budgit' Crane Assembly. Complete instructions are included.



Write for Bulletin 352 which contains full information of this quick, economical way to acquire jib or bridge cranes.



## 'BUDGIT' Crane Assemblies

**MANNING, MAXWELL & MOORE, INC.**  
MUSKEGON, MICHIGAN

Builders of 'Shaw-Box' Cranes, 'Budgit' and 'Load-Lifter' Hoists and other lifting specialties. Makers of Ashcroft Gauges, Hancock Valves, Consolidated Safety and Relief Valves and 'American' commercial instruments.

## MAN-MADE DAYLIGHT?



## ... that's FLUORESCENT LIGHTING!

The rival of daylight—good fluorescent lighting—is made even more economical when you use G-E “No Blink” Starters to increase the operating efficiency of your fluorescent lighting equipment.

In addition to eliminating entirely the annoying blinking and flickering at end of useful lamp life, G-E “No Blink” Starters give you these additional exclusive features:

### EXCLUSIVE FEATURE NO. 1

No “blackouts” can occur after momentary or longer line power interruptions because G-E “No Blink” Starters provide automatic and quick restarting when power is resumed.

### EXCLUSIVE FEATURE NO. 2

Maintenance men lose no time in relamping fixtures because G-E “No Blink” Starters start the new lamps instantaneously.

That's why enthusiastic users say the G-E “No Blink” Starter is the superior starter for every fluorescent installation.



### HAVE YOU READ THIS FACT-PACKED FOLDER?

Complete with new information on the need for proper fluorescent accessories, this folder will answer many of your questions. For your copy, write to Section G-21024, Appliance & Merchandise Dept., Bridgeport, Conn.

GENERAL ELECTRIC

ther north than Kentucky, for medicine and plastics; stramonium, which already grows wild in most of the U. S. except the West and North, for drugs; cinchona, for quinine, to be raised along the Pacific Coast and the Gulf Coast, as well as in the southern Appalachian region.

• **Kapok vs. Milkweed**—Dr. Boris Berkman first alarmed the delegates by pointing out the dependence of this country upon kapok (chief sources, the Western Pacific and South Asia) for use in life preservers and flying suits. Next he astounded them by analyzing the comparative characteristics of kapok floss and of floss from ordinary milkweed. His conclusions: the two fibers are practically identical, with milkweed getting the nod on a close decision because its heat-insulation properties are an eyelash better than kapok's.

Finally, the doctor said that he has developed a milkweed gin that separates the floss from the seeds economically enough to compete with the cheap hand labor of Java.

## Chemurgy and the War

A new and enlarged “War-time Edition” of “Pioneers of Plenty,” Christy Borth's history of chemurgy (Bobbs-Merrill, \$3.50), has been issued. The publishers point to the way “the chemurgists have been called upon to perform new miracles” and replace vital necessities that have been cut off by war.

## Informer Loses

Judgment of \$315,000 won from Pittsburgh contractors is set aside by court, but “repeal” theory is rejected.

The Third U. S. Circuit Court of Appeals at Philadelphia last week upset the \$315,000 judgment against a combine of Pittsburgh electrical contractors, won through an “informer's” suit following their tacit admission of conspiracy to defraud the U. S. by padding bids on 56 PWA projects (BW—Mar. 29 '41, p. 20).

• **Arnold's Reasoning Rejected**—Judge William Clark's opinion served notice that the court, while respecting the validity of the “informer” statute enacted during the Civil War, will tolerate no deviation from the rigid language of the act in determining its applicability. He rode roughshod over the contention of Thurman Arnold (BW—Mar. 7 '42, p. 40) that the law had been “repealed” by executive reorganization orders and was “inoperative” because it conflicted with “public policy.” The court declared that the original act had not been modified.

Judge Clark held—and his doctrine may become a hurdle for other “informer” actions pending in federal



## CALL OF THE WEST

The Western States Promotional Council—with a membership of hotels, oil companies, railroads, airlines, and other interested agencies—is getting out a series of stickers for West Coast hotels and business houses to slap on Eastward-bound mail. They also are mailing envelope fillers designed to counteract reports that blackouts are nightly occurrences and beaches are a mass of barbed wire.



courts as a result of frauds on New Deal pump-priming agencies—that the periodical estimates of the electrical contractors for interim payment did not constitute “claims against the United States government” within the meaning of the act. Although the estimates had to clear through PWA, Judge Clark held that the “claims” were against the local municipalities receiving PWA aid, since those agencies alone were parties to the performance contracts.

• **As Friend of the Court**—The government stopped to share 50-50 with the “informer,” Attorney Morris L. Marcus of Pittsburgh, who dug the old law out of the barrel after conspiracy indictments were obtained by Arnold against the contractors late in 1939. Arnold withheld active participation during the trial of the civil suit and even during the appeal until, when the judgment was about to be compromised for \$100,000 cash, he intervened as friend of the court and asked its dismissal.

The circuit court said its opinion did not prevent the aggrieved parties from suing to recover their share of the defrauded money. Marcus will ask the Supreme Court to entertain an appeal.

... full speed ahead ...

*for the Food Fleet . . . cargoes of square meals . . . the kind of grub the boys deserve. And no matter how long the voyage their food will be delivered as fresh as the day the convoy sailed.*



## This is an Air Conditioned War

**AFLOAT...ALOFT...ASHORE!**

TURNING OUT refrigeration and air conditioning equipment for hundreds of fighting ships and merchant vessels is a vital war task shouldered by the men and women of Carrier.

To the crews of these ships, "Carrier" means food as wholesome as in your own home. To fighting forces overseas, "Carrier" means tons of perishable supplies delivered fresh wherever needed. To men in compartments that are sealed during battle, "Carrier" means the very air they breathe.

Yes, this is an air conditioned war

—on all fronts. But especially on the production front where speed and precision are advanced by the control of indoor air. Control which eliminates contraction and expansion of metals, keeps out dust and dirt, prevents corrosion of finely machined surfaces.

Result — greater production of better airplane engines, more accurate bombsights, anti-aircraft shells timed to a split-second.

In these and scores of other war products, Carrier Air Conditioning is contributing to Victory.

Tomorrow, Carrier will apply the experience of the war period to the needs of people at peace.



*The Navy "E", one of the U. S. Navy's most coveted honors, was awarded to Carrier Corporation for excellence in war production.*



*Carrier Corporation, Syracuse, New York*

**WEATHERMAKERS TO THE WORLD**



**WINNING** a war is not all fighting on the battlefield. Donald Nelson says it will be won in the machine shops of America. Speed up production with air! Providing a more adequate and efficient air supply and more individual air tools may be the best way to boost production now. If your air compressor is obsolete, wasting time (time that can never be replaced) by frequent breakdowns, or if it is a "power-eater" as so much old equipment is . . . replace it now with a Wayne "Guaranteed Efficiency" unit. Ask for a Wayne Compressor engineer.

**WAYNE**  
*Air*  
**COMPRESSORS**



**THE WAYNE PUMP CO.**  
Fort Wayne, Indiana  
World's Largest Manufacturer  
of Gasoline Pumps

# THE WAR—AND BUSINESS ABROAD

## India's Hour

A great industrial nation may be in the making, and that—to business—is the long-range significance of Cripps mission.

Two recent developments already emphasize the important part which the Far East is going to play in the postwar world—particularly as far as the United States is concerned.

The first is the decision to make Washington, rather than London, the center from which the war in the Pacific is directed. At the same time, the Pacific War Council was created with full representation for Australia, New Zealand, the Netherlands, China, and Canada as well as Britain and the United States. This is one of several indications that the big powers intend to pay more attention in the future to the wishes and the needs of the colonial territories in the Orient. It is a move which, if taken long ago, would have added vastly to the United Nations' local war potential in the southeastern Pacific.

The second move is of greater long-term economic importance to the United States. It is London's offer of

dominion status to India—even full independence if an all-Indian Congress votes it—after the war, in return for full cooperation with the United Nations now in defeating the Axis.

Britain's plan is a simple one. It provides: (1) That immediately upon cessation of hostilities steps will be taken to set up in India an elected body charged with the task of framing a new constitution for the country; (2) that provinces which are reluctant to accept the new constitution may remain outside the proposed federation and, if they choose, join it later.

## All-India War Cabinet Urged

The British, while insisting that it is not possible to draw up a satisfactory constitution in a short time, particularly when the country is faced with a major war crisis, have suggested that an all-Indian national war cabinet be set up under the Viceroy, Lord Linlithgow. In this cabinet, the sole British member (beside the Viceroy) would be the British defense officer in charge of the Indian war area. Right now this is General Sir Archibald P. Wavell.

India's problem is to find a majority among the country's diverse political and religious groups who will accept—possibly with some modifications—the plan which has been brought from London by Sir Stafford Cripps. Major fac-



## LAST VICEROY?

In New Delhi Britain's Viceroy to India, Lord Linlithgow (left), shared the limelight this week with Sir Stafford Cripps as they worked together to "sell" India's diverse political leaders (page 38) on the idea of co-

operating with the United Nations to defeat the Axis powers in return for the promise of full dominion status after the war. Lord Linlithgow is seen here greeting some of India's official representatives at the first meeting of the National Defense Council last October.



## Now we know what "Total War" means . . . and we're for it!

**L**IKE MOST AMERICANS, we didn't understand what total war means.

We had a vague idea that it meant "going all out"...throwing everything we have into the battlefield. Now we realize that total war means more than that...it means sacrifice, inconvenience, and hard work for every one of us.

For example, on March 6, the Government issued an order prohibiting the sale of any typewriter, standard or portable, new, used, or rebuilt, to the general public!

And on March 15, in agreement with the Government, we have drastically curtailed the manufacture of portable typewriters, and our future portable production is designated for use only by the armed forces.

Also, beginning March 15, the production of standard typewriters has been sharply reduced, and such standard machines as

we build in the future will go only to Government agencies, to the armed forces, or to manufacturers of war supplies.

As a result, we are now able to increase our actual war production. All of the resources of the Royal Typewriter Company, as much as possible of our skilled labor, every available inch of our floor space, are being converted to the manufacture of ordnance!

THIS, WE NOW REALIZE, is the true meaning of total war . . . and we are for it, lock, stock, and barrel! We are proud of the fact that the Royal Typewriter Company has been called upon to halt its normal business in mid-air and to "go all out" for Democracy.

We believe that every manufacturer in the United States whose facilities can be used for wartime production will feel the same way. "Business as usual" has no place in the scheme of total war. It may be an inconvenience to you, may even be a sacrifice on your part, to have to do without a new Royal Typewriter. But . . . if the Axis powers were to win this war, it would be a long, long time before you could buy any new typewriter!

*By manufacturing ordnance now, Royal is hastening the day when you, a free man living in a free country, can once more walk into any store in the land and buy anything you want!*

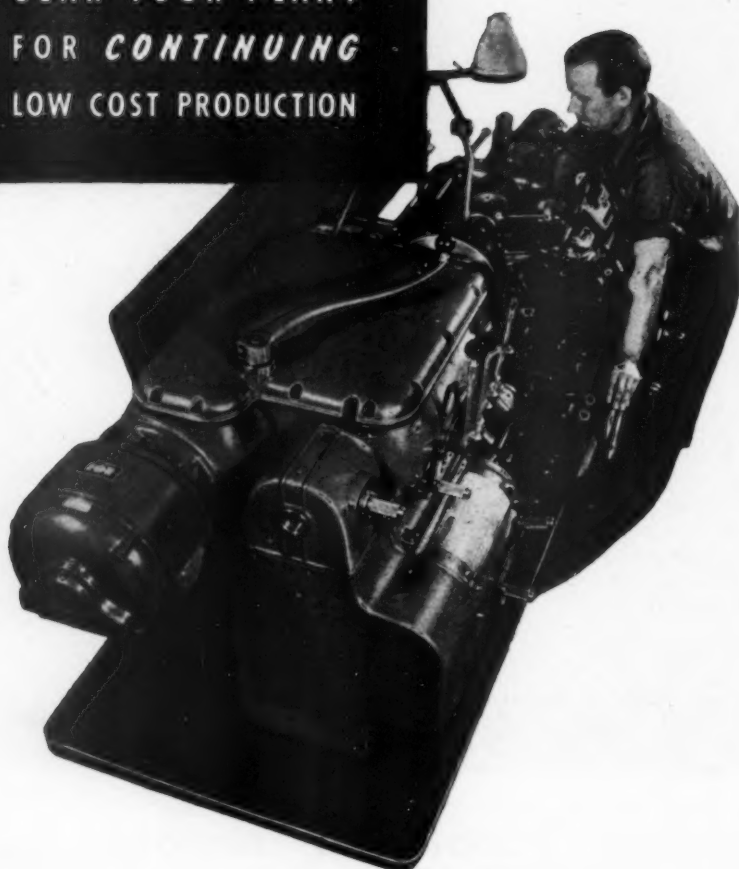
THAT, AS WE SEE IT, IS WHAT THIS WAR IS ALL ABOUT!

### ROYAL TYPEWRITER CO., INC.

Makers of Roytype® ribbons and carbon paper. Expert typewriter service available everywhere.

\*Trade-mark Reg. U. S. Pat. Off. Copyright 1942, Royal Typewriter Co., Inc.

GEAR YOUR PLANT  
FOR *CONTINUING*  
LOW COST PRODUCTION



These days wise executives are gearing their plant for peak production at lowest cost per man hour. And this is why so many of these same executives are specifying Axelson Lathes. They have learned from performance records that an Axelson Lathe is second to none when it comes to precision, speed and economy.

The best in design, materials and workmanship have been combined by Axelson in producing a lathe unexcelled in operating performance. They operate year after year at maximum efficiency with minimum power consumption. Study an Axelson—you'll like its clean, compact design. Send for latest bulletins today.

**AXELSON MANUFACTURING CO.**  
6160 South Boyle Avenue, Los Angeles, California  
(P. O. Box 98, Vernon Station)  
50 Church St., New York City • 3844 Walsh St., St. Louis, Mo.

*Before you buy any lathe investigate AXELSON*

**MAIL THIS COUPON TODAY!**

AXELSON MFG. CO., 6160 Boyle Ave., Los Angeles, Calif.  
Get full details now on this outstanding line of heavy duty lathes.  
Latest front and rear views of lathes, together with complete descriptions and specifications.

NAME \_\_\_\_\_  
COMPANY \_\_\_\_\_  
ADDRESS \_\_\_\_\_

**Study These Features**

24-Speed Headstock  
Unit Mounted Constant Speed Motor  
Hardened and Ground Gears  
Anti-Friction Quick Change Gear Box  
Rigid Taper Attachment  
Accurate Master-Milled Lead Screw  
Automatic Brake  
Double Clutch for Forward and Reverse Spindle Rotation  
Cam-Lock Spindle Nose  
2-Speed Tailstock Spindle

For 50 years Axelson has been a leader in the manufacture of oil field equipment and for over 25 years has produced superior heavy duty lathes.



tors in the problem are the country's 240,000,000 Hindus, led by Pandit Jawaharlal Nehru and Mohandas K. Gandhi; the Moslem party with its 77,000,000 members; and the native princes, who will lose much of their power if India is federalized.

Unselfish Indians are holding before the eyes of leaders who are reluctant to submerge minute differences of opinion the prospect of a great industrial future for the country. This, they are convinced, will come when India is free to control its own foreign trade and work out its own economic destiny.

India blames Britain for the fact that it has such a low standard of living today when it is potentially one of the richest countries in the world. At the time the country came under the control of Britain, it had highly developed handicraft industries which provided a good living for many people in a greatly over-crowded country and maintained a reasonable balance between an agricultural and an industrial economy.

**Feeder for Britain's Factories**

Britain immediately altered this plan to turn the country into a great raw-material producer to feed the factories of Britain. How this affected the country is typified by developments in the textile industry. Between 1814 and 1835, British cotton-textile exports to India increased from less than 1,000,000 to more than 51,000,000 yards, while the exports of Indian cotton goods to Britain declined from 1,250,000 to 306,000 pieces.

By 1850, India, which had sold its textiles all over the world, was buying more than one-fourth of Britain's textile exports and whole industrial communities were wiped out by the arrival of cheap cotton imports from abroad.

**Potentially an Industrial Nation**

Indians realize that they possess the resources to make them a great industrial nation. With their high-grade iron ore, their vast reserves of coal and manganese, and their own huge market for steel products, they believe that they can become one of the world's industrial powers. The example of Russia during the last 20 years has frequently been cited by Jawaharlal Nehru to the great National Congress party which he heads. And China's industrial progress, even under the extreme difficulties of the last ten years, has impressed Indians who have helped to haul goods over the Burma Road to Chungking.

This is the economic background against which this week's developments must be interpreted. The importance to American business of the outcome of the Cripps mission to New Delhi, and of the new leadership established in Washington since it has become the headquarters of the Pacific War Council, should not be overlooked.

## Telling Argentina

United States application of economic pressure is expected to bring cool neighbor back into the hemisphere fold.

Argentina is beginning to feel the effects of the economic pressure which the United States applies to nations which are indifferent to this country's stand in the war.

• **Not in the Figures, But—**No figures are available yet to prove that United States exports to the Argentine are off. In fact, when Buenos Aires recently released its foreign-trade figures for January and February, they showed that imports from the United States for those two months were almost double the total for the same period a year ago.


But in export circles it has become plain that the Argentine, since it indicated beyond a doubt at the Inter-American Conference at Rio de Janeiro in February that it would not line up with the United Nations—not even to the extent of curbing Axis activities within the Argentine—is running into increasing difficulty in getting export permits on goods that the country is trying to buy in the United States. March trade, according to insiders, inevitably will show a marked decline.

• **Actual Boycott Denied—**Washington officials declare, with some justification, that there is no real boycott against the Argentine. They point out that it is only natural, when there is a shortage of goods, that neighbors who have run the risk of attack in order to cooperate fully with the United Nations should be given a preference on their purchases in the United States.

This accounts for the order for the Argentine Military Purchasing Commission to return home at once. And for reports among traders that they have had great difficulty of late getting export permits for goods bound for Argentina, though no difficulty is experienced in clearing similar items for Mexico, Brazil, and Chile.

• **No Surprise—**Argentine trade circles in New York registered no surprise when confronted with these reports. Washington is still buying strategic goods from Buenos Aires, and continuing to allow certain items to clear for export to the south.

Traders admitted that business would probably shrink further during the next few months and that Buenos Aires would be compelled to bow to Washington's demands or run the risk of being completely shut off from the United States market. But they still have not called a halt to long-term plans to standardize and style Argentine products to meet the demands of the United States



**Science says he can work  
no better than the quality  
of the light you give him**

What's more valuable than a good worker at a good machine today? That same man with 50 foot candles or more of working daylight from a MILLER Continuous Wireway Fluorescent Lighting System!

Without light any war production tool is worthless. The better the light . . . the better your men can see what they are doing clearly and sharply and without eyestrain . . . the speedier and greater your production. Science says it is just as simple as that. Quickly and economically installed in your plant today, MILLER 50 FOOT CANDLER and 100 FOOT CANDLER will provide 50 foot candles or better of high quality daylight . . . help you get *more work* from present manpower and machines. MILLER TROFFERS will duplicate that performance in your office or drafting room. *Wire for complete information.* (Representatives in principal cities.)

### "Fingertip Facts" about the MILLER Fluorescent Lighting System

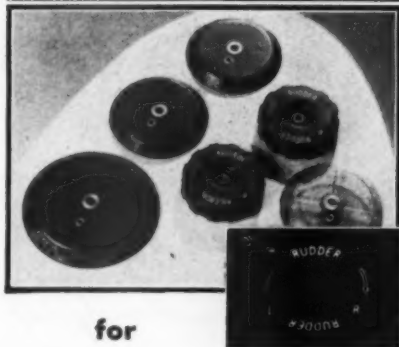
**HIGHER ILLUMINATION** . . . 50 to 100 foot candles—men work better, faster. • **30 TO 50% LOWER INSTALLATION COSTS** . . . Make war production dollars go further. • **FASTER INSTALLATION** . . . Steps up building schedules—plants get into production quicker. • **SIMPLIFIED MAINTENANCE** . . . Easy-to-clean, removable porcelain-enamel reflectors—save man-hours for production. • **UNIFORM LIGHT DISTRIBUTION** . . . Floor layout or production setup can be changed at any time without need for touching lighting.



**MILLER**  
50 FOOT CANDLER  
100 FOOT CANDLER  
MILLER TROFFERS  
Continuous Wireway Fluorescent  
Lighting Systems

**THE MILLER COMPANY**  
MERIDEN, CONN.  
Pioneers in Good Lighting Since 1944  
• MILLER offers a complete line of  
Incandescent and Fluorescent lighting equipment.

## ERIE RESISTOR *Custom Molded* LUMINOUS PLASTICS



### for "BLACKOUT" Applications

THESE aircraft dials, which are molded at high speed of non-restricted plastics, have high daylight visibility and glow clearly when subjected to ultra-violet rays. All lettering is indented and painted from the rear, eliminating surface wear from dust and handling.

Erie Resistor has complete facilities for designing and molding "Black Out" Plastics for such applications as valve and switch handles, name-plates, instrument dials, etc. Inquiries will receive prompt attention.

Plastics Division  
ERIE RESISTOR CORP., ERIE, PA.

## HOW TO SOLVE Your Industrial Finish Problems on War Products

JONES-DABNEY CO. has industrial finishes to meet a wide range of government specifications and to fit your own production schedules.

With a substantial part of our production facilities and our research laboratories converted to war needs, we are prepared to deliver promptly lacquers, varnishes, enamels, synthetic resins and paints meeting U. S. specifications.

All our knowledge gained through years of service to industrial manufacturers is available to give you finishes that meet government "Specs," and our trained field men are ready to show you how each required specification may be most efficiently and economically fitted into your production program.

Write today for our useful new booklet on U.S. specifications, and the finishes required for your war production.

**Jones-Dabney Co.**  
Industrial Division of  
**DEVORE & RAYNOLDS CO., INC.**  
LOUISVILLE, KY.

market (BW—Mar.21'42,p34). Most of them believe that the present political differences of opinion will not last long in the face of the problems which Washington's economic pressure program will raise in Buenos Aires.

## Ottawa's Donald

Price Czar Gordon is now running an advanced laboratory in total war economy which U.S. can't afford to overlook.

OTTAWA—Don't be so preoccupied with what Donald Nelson is doing that you ignore the doings of the other very potent Donald of the North American total war front. Otherwise you'll miss important warnings of things to come. The long and broad shadow of Donald Gordon, czar of the Canadian price ceiling, is bound soon to extend south of the 49th parallel.

• **Total War Economy**—Gordon is setting out to bring Canada to a total war economy by ways that will have significance for Washington. In fact, during the second quarter of the year, Ottawa may justifiably be regarded as an advanced laboratory.

Gordon's concern when he took command of Canada's fight against inflation last November was largely with prevention of a postwar economic collapse like that produced by the last war. But since Pearl Harbor he has switched his economic strategy to meet the needs of an immediate emergency and is prepared to let the future—including the position of business—take care of itself.

• **Man in a Hurry**—Gordon's objective for the next three months is to strip Canada to the bare essentials of civilian existence, and to divert into war production every ounce of energy and inch of capacity that he is able to release. His plan is the simple one of getting maximum war production by the shortest and quickest route possible.

Gordon has decreed that everything wasteful in Canadian industry and business must come to a full stop. He has warned business men that the competitive system is out for the duration and that it is being replaced as rapidly as possible by a system of maximum production at any cost.

• **Forced to Standardize**—Whole industries are being forced to standardize their products for the sake of economies of labor, raw materials, and factory space. Three weeks ago the canning industry was given its pattern for the year. The clothing industry was then warned to get ready to standardize (ready-made section by May 1, customs tailors by Aug. 1), but in order to halt the buyers' rush which immediately developed, Gordon brought standardiza-



## KEY MAN IN INDIA

All India waited this week to hear what Jawaharlal Nehru would say after Sir Stafford Cripps, Prime Minister Churchill's special emissary, had outlined to him London's plan to give India greater political and economic independence after the war (BW—Mar.21'42,p40). Without the cooperation of Nehru, leader of India's largest political group—the powerful Congress party created by Mahatma Gandhi—no solution of the difficult problem is possible. And without strong aid from India, Great Britain cannot expect to halt the Japanese advance across Burma.

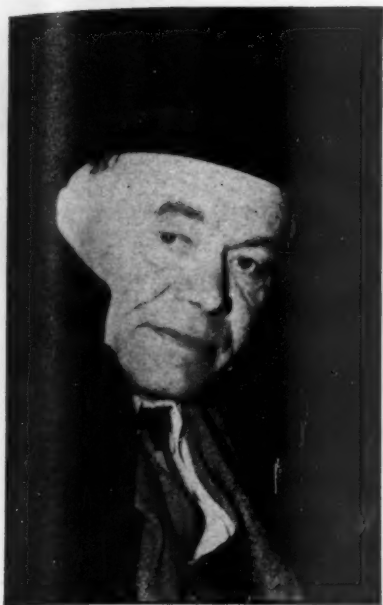
tion for all men's clothing into effect overnight last week.

At the same time, bakery production was standardized and a millers' advisory committee formed to work with Gordon's men on standardization plans for flour and cereals (BW—Mar.28'42,p42).

• **Shoes Must, or Else**—The shoe industry has only a few weeks more to achieve voluntarily the maximum standardization demanded by the hard-boiled Mr. Gordon. If the industry fails to do the job satisfactorily, a group of Gordon's specialists will do it and shoe manufacturers will be forced to accept whatever standards are set.

With standardization well under way, Donald Gordon has now turned to organizing distribution in order to eliminate waste and pare costs. J. D. Wood & Co., Toronto firm of business engineers, has been engaged to help.

Zoning on a local and national scale



## THE BEAVER'S BACK

Lord Beaverbrook, back in the United States to speed lend-lease aid to the United Nations, sounded a new note when he declared in a broadcast to his native Canada: "Defeat of the Axis cannot be accomplished in the factories. Unless we have resolute, determined, brave citizens trained to handle the tanks, guns, ships, and planes we are building we cannot be the peacemakers." Canadians, listening to "the Beaver," chalked up his plea for an armed offensive in 1942 as the opening gun in Prime Minister Mackenzie King's pending plebiscite on nationwide conscription.

is already in the picture. For example, consumer commodities manufactured or processed in Hamilton, Ont., will not be shipped to distributors in Montreal if Montreal industry can supply the local market. The double aim is to conserve transportation facilities and to conserve costs which press against the retail price ceiling.

• **Big Business vs. Little**—An important angle of economy in distribution is the impact on competition between mass producers and big retail outlets in metropolitan centers and small producers and outlets in adjacent communities. First survey in this connection is now being started in the case of the baking trade.

Mass-production bakeries in the cities have been steadily winning trade from local bakers in towns and small cities within a radius of 100 miles. During the first two years of the war, bread prices were kept down by informal price control in the face of increasing costs.

As a result, scores of small bake shops folded in Ontario and Quebec. The current survey for the Gordon Board is to determine whether in the interests of war economy the small independents or the mass producers should have this interurban market. Both sides are being invited to submit arguments. Gordon is now subsidizing wheat for domestic consumption because Ottawa has upped by 20¢ a bu. the guaranteed price for this year's crop.

To keep these subsidy payments at a minimum he must squeeze production and delivery costs on bread. A pivotal question is whether interurban delivery costs of city bakers balance higher unit production costs of local bakers. Consumption of gasoline and rubber in interurban deliveries is a factor favoring the local bakers in the showdown.

• **Price Roof Extensions**—Actually these production and distribution economies are inevitable offshoots of the Canadian price ceiling program. To maintain the price roof, Gordon has found it necessary to counterbalance increasing materials and labor costs by squeezing out overhead in production and distribution. He has also found it necessary to link his price roof with war production needs and tax revenue needs.

Standardization permits mass production of actual consumer needs and helps to keep consumer goods under the ceiling; releases industrial capacity for war production; and, by banning all frills, reduces the spending urge, which means that more income is free for the Treasury to drain into the war chest.

• **Man-Power Plan**—Before adjourning parliament for a three weeks' Easter recess—to enable ministers to campaign for an affirmative vote on the plebiscite in which Canadians will tell Prime Minister Mackenzie King whether he can introduce conscription for overseas service with their approval—the Ottawa government produced the framework of a man-power plan.

It provides for (1) freezing agricultural labor in its present employment; (2) barring nonessential employment in jobs designated as restricted to men of military age; (3) making it compulsory for nonessential industry to release skilled workers for war industry at the call of Ottawa, although it doesn't impose compulsion on workers to make the transfer; and (4) establishes an inventory of man power, including women, available for war production. Warning was given that further compulsion would come if needed.

• **War Risk Insurance**—Also before adjournment the government announced a war risk insurance measure which will cover property losses up to \$3,000 from enemy action without cost to owners and give protection above that amount under a premium plan. The system is being worked out by the government and insurance companies.

## ★ Complete Designing & Drafting Service NOW AVAILABLE

OUR Designing and Drafting Department, long experienced in the creation and detailing of high precision machines, may be able to render you valuable assistance . . . Concentration of our machine shop on war production enables us to offer a part of our designing facilities for outside work.

Whether you require tool designing or creative development work, we suggest that you get in touch with us for particulars.

## PACKAGE MACHINERY COMPANY

Springfield, Massachusetts

*IT'S JUST  
AS IMPORTANT FOR ME TO KNOW  
THE EXACT MEASUREMENTS OF MY  
STORED LIQUIDS AS IT IS FOR ME TO  
KNOW MY PRODUCTION COSTS*



Accurate information concerning the levels of all liquid assets makes efficient control of stored liquids a much simpler task. A LIQUIDOMETER tank gauge on the job insures correct indications or recordings at all times.

LIQUIDOMETER Remote Reading tank gauges function automatically—no pumps, valves or auxiliary units required to read them. Balanced hydraulic transmission system ingeniously compensates for temperature variations on communicating tubing. Accuracy unaffected by changes in specific gravity.

Models are available for Remote Signals, automatic control of pumps, etc. Direct Reading models are also available where remote reading is not desired.

LIQUIDOMETER tank gauges are approved by Underwriters' Laboratories and other like bodies for gauging hazardous liquids.

Write for complete details on LIQUIDOMETER instruments.

THE LIQUIDOMETER CORP.  
2871 SKILLMAN AVE., LONG ISLAND CITY, N.Y.

# PC Glass Blocks TRANSMIT D



**ST. LOUIS ICE CREAM COMPANY** did a beautiful job of remodeling their plant. Here—where cleanliness is of vital importance—PC Glass Blocks were a wise choice. The panels can be cleaned quickly and easily with a brush or a damp cloth. Maintenance costs are reduced, for the panels are not harmed by the humid atmosphere in the plant. Architect—Ben Shapiro.



**GRANITE HOSIERY MILLS** report success with their PC Glass Block installation as follows: "Today, with the thermometer down to zero, we really got the full benefit of Glass Blocks, as we have some fine gauge machinery within three feet of these blocks. Should we have kept our ordinary windows, I am sure we would have been unable to operate this equipment on a day of this kind."



**GREENFIELD TAP & DIE CORPORATION** uses Bristol LX-75 PC Glass Blocks for softly-diffused daylight. LX-75 Blocks were chosen because mechanics frequently look up from precision work to rest their eyes. A Fiberglas screen in this block diffuses transmitted daylight to provide a panel that is easy on the eyes—even when subject to direct sunlight. Architects—McClintock & Craig.



AN  
Block  
Bette  
clean  
And  
condi  
cision  
ances  
tage  
We  
here  
can h  
of yo  
you s  
you p  
your  
Block  
how

is refle  
are vi  
entirel

Business

# DAYLIGHT *Through* AN INSULATED WALL!

*That's why they offer so many advantages that  
result in greater plant efficiency*

ANY plant can benefit from glass block construction. PC Glass Blocks provide better daylighting. Better temperature control. Easier cleaning. Lower maintenance costs. And where unvarying operating conditions are necessary to keep precision machinery within close tolerances, you can get the added advantage of greater product uniformity.

We can barely begin to discuss here the many ways PC Glass Blocks can help you increase the efficiency of your plant. But it is information you should have on hand whether you plan to build, remodel or add to your plant. Our book on PC Glass Block construction will show you how other plant owners have used

glass blocks successfully. Mail the coupon below for your copy.

### *There's no waiting for PC Glass Blocks*

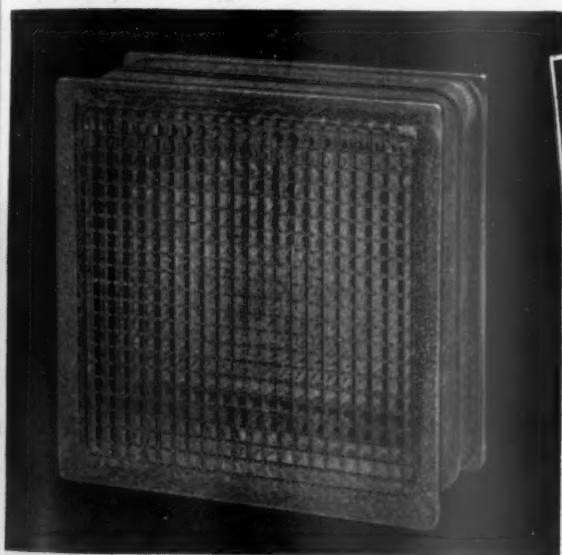
Eight attractive patterns of PC Glass Blocks give you a wide selection to choose from—and we have ample stocks on hand right now, including the diffusing and prism light-directing patterns. These patterns are specially designed to provide proper daylighting for a wide variety of plant layouts.

Glass block construction requires no use of critical materials in small panels—very little metal is required for large panels. Many plant owners have set up a program of progres-

sively replacing ordinary window sash with PC Glass Blocks. This change can be made a panel at a time, a floor at a time, or department by department. Such a program of improvement can proceed without interruption due to material delays.

### *PC Glass Blocks give you all these advantages:*

BETTER DAYLIGHTING  
INSULATION  
IMPROVED TEMPERATURE CONTROL  
IMPROVED HUMIDITY CONTROL  
LESS CONDENSATION ON WINDOW AREAS  
EASIER CLEANING  
ELIMINATION OF DIRT INFILTRATION  
REDUCED MAINTENANCE COSTS  
PRIVACY



**PC PRISM LIGHT-DIRECTING GLASS BLOCKS** direct daylight by means of prisms on the inside of the block faces. Daylight is directed to the ceiling from which it is reflected to working areas far within the room. Glare conditions are virtually eliminated, because sunlight is diverted almost entirely outside the field of normal vision.



Pittsburgh Corning Corporation  
2076-2 Grant Building, Pittsburgh, Pa.

Please send me your free, illustrated booklet that tells how to use PC Glass Blocks:

☐ for factories; ☐ for commercial and public buildings;  
☐ for homes.

(Be sure to indicate type of building)

Name.....

Address.....

City..... State.....

# A-B-C's of British Labor Policy

Centralization of administration, right at start of war, was smartest move taken, but England has done little better than we have at trying to put a lid on wages.

Britain has made some smart decisions and some serious blunders in handling labor problems since the outbreak of the war.

Smartest move—and one which should be noted by Washington now—came at the beginning of the war when London centralized the administration of the entire labor supply, both for industry and the armed forces, in one agency.

• **Dodging the Big Issue**—But London has done no better job than Washington—even after two and one-half years of war—at placing a ceiling over wages. When faced squarely with the issue last fall, British labor leaders refused to support any plan to freeze wages, and the Churchill government did not press the issue.

Britain has no nation-wide basic 40-hour week with overtime pay starting after 40 hours. Labor contracts are made on an individual bargaining basis by each factory or industry with the basic work week in most of the war industries ranging between 44 and 48 hours. British employers pay overtime but this is determined by company contracts with the workers. Most workers in Britain's war industries are still working more than 60 hours a week, though the government has publicly urged industry to set a 60-hour limit because of the rapid decline in productivity when longer hours are worked over protracted periods.

• **Canada Scores a "First"**—Long before the war, many British labor unions had contracts with employers calling for a sliding scale of wages tied to the country's cost-of-living index, but no such plan has been enforced on a nation-wide basis since the outbreak of the war. It was Canada that froze basic wage rates last September and inaugurated a compulsory wage bonus system tied to the cost-of-living index. In Britain that system is operative only in those industries which have succeeded in selling employers on the idea and writing it into their contracts.

Though Britain had the foresight to centralize all labor problems in a single agency, London failed to make a complete inventory of the country's man and woman power at the beginning of the war. As a result, registrations of individuals by age groups, communities, or trades continues on a haphazard basis, and skilled workers drafted into the armed services have had to be demobilized in order to keep war industries operating at necessarily high levels.

• **Questions and Solutions**—How Britain answered a score of labor questions,

many of which now confront employers and labor in the United States, is summarized in this article compiled from data supplied by Business Week's London Bureau.

*How has Britain centralized wartime labor administration?*

Broadly speaking, London has centralized in the Minister of Labor and National Service the administration of services which, in the United States, are spread over the Department of Labor, the Labor Supply Branch of the War Production Board, the National War Labor Board, the Employment Security Division of the Social Security Board, plus many of the services now administered by the National Labor Relations Board and the Selective Service Boards. This one ministry is the policy-making agency and administrator of Britain's entire wartime labor supply and military man power.

To help in the formulation of all national labor policies, the government soon after the outbreak of the war, created a National Joint Advisory Council composed of 15 representatives of the British Employers' Confederation and 15 from the Trade Union Congress, presided over by the Minister of Labor. No reports of its recommendations are published but it is known to have advised the government on wages, price-fixing, restrictions on profits, voluntary savings, reserved industries (deserving draft deferment), labor supply and distribution, wartime holidays, the cost of living, and the drastic powers over labor which have been applied in a few industries.

Like the Prime Minister's move a few weeks ago creating a compact War Cabinet to act on urgent issues demanding prompt decisions, the government more than a year ago created a Joint Consultative Committee of only seven employers and seven workers to act in close collaboration with the minister and to set up machinery to prevent trade disputes leading to strikes and lockouts.

In May, 1940, a Labor Supply Board was created, consisting of two industrialists and two members of the Trade Union Congress. Regional and local Labor Supply Committees, composed in the same way, administer London's rulings and pass along complaints from workers and employers.

Britain's nearest approach to the Murray plan—government-management-labor direction of the war production program—developed late in 1940 when a

## PREVIEW FROM BRITAIN V. LABOR POLICY

There are many popular misconceptions in the United States about the way that Britain has handled labor problems during the war.

Britain's basic work week has not been lengthened in order to avoid paying heavy overtime rates, and this is no major issue in Britain—even after two and one-half years of war.

British labor has been as persistent as American in refusing to allow a ceiling over wages.

Strikes are illegal unless the recognized mediation boards fail to arbitrate successfully within three weeks. But strikes and hours lost are still recorded in the official Labor Gazette.

The government has the authority to shift workers from job to job, and to remove managers who prove inefficient.

Some weeks ago Business Week asked its London Bureau for answers to a score of questions about labor, questions most frequently asked by its executive readers. Here—in the fifth of a series of articles on Britain's wartime business experience—are the timely answers.

Trade Union Advisory Committee was created to assist the Ministry of Supply and the Air Ministry. Local boards of these committees—consisting of three employers, three trade unionists, and representatives of the appropriate ministries—assist the government in placing subcontracts in each of the industrial areas of the country. Trade unions are also represented in the Ministry of Food's local committees, and in the local Price Regulations Committees.

The government even operates its own labor-training schools (53 when last reported) to supplement apprentice courses in schools and private industry.

*Does Britain draft labor for war industry?*

Yes. The Emergency Powers Act of May 22, 1940 (prolonging and enlarging earlier emergency legislation), gives the Minister of Labor the authority to direct any person in the United Kingdom to perform any service which the minister finds him capable of doing.

Actually, these powers have been exercised modestly and slowly.

To prevent labor pirating, employers in the construction and war industries were forbidden as early as June, 1940, to hire a worker except through the local, government-controlled employ-

# 98.2% of 53,144 Harvester Employees Are Buying War Savings Bonds Regularly



THE WINNING of this grimmest of all wars, as every citizen knows, calls for a triple-offensive against a powerful enemy. Americans must *fight* the war, *build* the production, and *FINANCE* the Victory. Let two—or even *one*—of these objectives fail and the cause is lost.

International Harvester, therefore, takes the keenest pleasure in announcing, in behalf of its employes, an outstanding participation in the purchase of United States Savings Bonds.

More than **98.2%** of Harvester men and women all over America—52,187 of them as this statement goes to press—are buying shares in America and a financial interest in the Victory America fights for. They believe it's the best investment their money can buy.

Today, almost all operating units of International Harvester—thanks to these loyal and patriotic employes—hold the Treasury Department's special merit certificate.

The Harvester Company was one of

the first organizations in the nation to be designated by the Treasury Department as an issuing agent for the sale of Defense Bonds, Series E. It has made available to employes, for this purpose, the machinery of the Employees Savings Plan which was already in full operation. In addition the company provides a safe-keeping service under which all bonds purchased are deposited with designated custodian banks and held subject to the order of the employe-owners.

The response in the Harvester organization has been an inspiration from the outset.

Harvester men and women are buying a bigger and bigger share in America—buying not just once, but regularly.

Harvester people, building an ever-increasing volume of war materials on their daily jobs, have seen 2500 of their number off to fight the war itself. Their spirit and their will, expressed in ACTION, give assurance that America's all-out drive **SHALL NOT FAIL.**



**BUY  
A SHARE  
IN  
AMERICA**

## Defense Bond Buyers 100% in these Harvester operations:

Auburn Works  
Benham Coal Mines  
Canton Works  
East Moline Works  
General Office  
Harvester Press  
Iron Mines  
McCormick Twine Mill  
Milwaukee Works  
Richmond Works  
Rock Falls Works  
St. Paul Works  
West Pullman Works  
and 113 of the International  
Sales and Service operations



# INTERNATIONAL HARVESTER

**Stymied by a  
Tangled Switchboard!**



**DON'T WALK! DON'T WAIT!  
USE AMPLICALL-TALK!**



There's no walking, no waiting, no wasting when your business uses AMPLICALL—the split-second Intercommunication System. Here's the newest aid to efficient operation that puts every individual, every department of your business in instant talking reach at the touch of your finger. And you do it without leaving your desk!

AMPLICALL saves your business time; it conserves energy, coordinates operation, gets ideas and orders into action in seconds, prevents costly delay and errors, relieves busy switchboards. Don't walk—don't wait—don't waste; join the thousands of American businesses using AMPLICALL!



### **AMPLICALL FOR EVERY NEED—**

No matter what your business may be, there is an AMPLICALL System for your needs. It's easy to install and use—and it's inexpensive. Write us today for complete details.

## **Rauland**

RADIO-SOUND-COMMUNICATIONS

(WEBSTER-RAULAND SOUND DIVISION)  
4245 North Knox Ave.  
Chicago, Illinois, Dept. 1-A.

Send us full information covering Amplicall intercommunication Systems.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

ment exchange which was prepared to supply skilled workers for key industries.

Real drafting of workers didn't start until Feb. 24, 1941, when all who had worked in the shipbuilding industry a minimum of 12 months at any time in the last 15 years were compelled to register. From this registration the government drafted men as fast as they could be placed in shipyards. Since then, the demand for skilled labor has become so acute that workers for several other industries have likewise been drafted.

Women in the 20-21 age group were first forced to register in April last year. Since then the plan has been continued through the 31 age group, though the British themselves complain that draft boards are far too lenient in deferring potential women workers. Biggest-scale move to draft women came last December when all women 20-25 years old in the retail trades were ordered to accept jobs in war industries as rapidly as the government could place them.

**Are all workers registered and classified by occupation?**

No. The power to demand a nationwide registration for employment was granted in March, 1941. The purpose is to enable the government to survey the available labor force in the country in order to select those who are likely to be useful in the war effort, whether they are employed or not. In this way, the government is able to make sure that employed persons are rendering the most useful service possible and to place more citizens on jobs.

Actually, only men who have worked in certain industries (such as shipbuilding) have been forced to register. Women between 20 and 31 just completed their registration this month.

**Have strikes and lockouts been banned for the duration?**

Theoretically, yes; actually, no.

A law passed in July, 1940, prohibits lockouts and strikes unless disputes which have been carried to the National Arbitration Tribunal (Britain's equivalent of our National War Labor Board) are not settled within 21 days.

It should not be overlooked that this law requires that employers observe terms and conditions of employment not less favorable than "recognized terms and conditions" which have been settled by the machinery of negotiation or arbitration between employers' and unions' organizations which are "representative respectively of substantial proportions of the employers and workers" engaged in the industry in the district concerned. This implies the obligation on the part of all employers to recognize unions.

Though the National Arbitration Tribunal was not intended to displace existing machinery for handling labor disputes, it has been faced with a mass of claims ranging from printers to tex-

tile operators. Like its counterpart in the United States, the tribunal occupies a precarious position. After one case last fall when it had rejected a demand for increased pay for nurses, the secretary of the union concerned was instructed to report to the Trades Union Congress and press for termination of the tribunal.

Though Britain is popularly believed to have outlawed strikes for the duration, the Ministry of Labor Gazette continues to publish strike statistics each month. The number of strikes has not been drastically lowered but the number of workers involved, and the hours lost are greatly reduced.

Up to January of this year, 146 men, 5 women, and 14 firms had been prosecuted for refusing to accept the ruling of the National Arbitration Tribunal. In December, three strikers were, for the first time, sentenced to imprisonment for one to two months for refusing to go back to work. When the strike was settled, the men were released and reinstated after only eleven days in prison.

**Has Britain lengthened the basic work week?**

No. But Britain's "standard week" is longer than our 40-hour week. In Britain there is no national standard set by law. The work week in each industry is set by collective bargaining agreements between workers and employers in that industry. In the shipbuilding, engineering, and munitions industries, for instance, the basic work week is usually 47 or 48 hours; in the building industry, 44 hours.

Most British war industries are operating on a continuous 24-hour basis for six days a week. There are either three 8-hour shifts or two 12-hour shifts. In the latter case, workers receive overtime at time-and-a-half rates (or more if their contracts call for it) for all time over the basic schedule.


**How long is the average work week in Britain?**

No official figures are available. But when the Select Committee on National Expenditure last reported, it revealed that, where the normal working week before the collapse of France had been 50 or 55 hours, it was commonly increased to 65 and, in some cases, to 72 hours a week during the summer and fall of 1940. Despite a Ministry of Labor recommendation that hours should be reduced to 60 a week, with the ultimate aim of reducing them to 55 or 56, some industries—where it is difficult to find additional skilled workers for more and shorter shifts—still employ their men more than 60 hours a week and pay the heavy toll of overtime rates.

In an official report last month the British Library of Information repeated a recent government recommendation that "in many, if not most, cases 5½ or 6 days of production (with or without two

# Controls

## FOR THE CRUCIBLE OF FREEDOM



**P**RODUCTION FOR WAR in all essential materiel gets back to one fundamental — Control . . . Planes, tanks, guns, trucks, jeeps, housing, even uniforms and food, initiate with fact-finding instruments that record and control. For industry, regardless of the nature of the product or the size of the operation, *Instruments by Brown*, report or govern the progress of vital processes. *Controls by Minneapolis-Honeywell* maintain plant temperatures and conditions to the demanded degree for product uniformity or employee efficiency. Put this *Double Control Service* to work in your plant. Avail yourself of the Combined Control experience of Brown and M-H engineers. Address Minneapolis-Honeywell Regulator Company, Minneapolis, or its subsidiary, Brown Instrument Co., Philadelphia, Pa.

★ ★ *Instruments by* **BROWN** *for* THE INDUSTRIES  
*Controls by* **MINNEAPOLIS-HONEYWELL**

## Clients served:

(In order of appointment)

Liggett & Myers Tobacco Co.  
Western Electric Company  
Loose-Wiles Biscuit Co.  
Association of American Soap  
and Glycerine Producers, Inc.  
Bank of the Manhattan Company  
Bigelow-Sanford Carpet Co.  
American Telephone & Telegraph Co.  
Copper & Brass Research Assn.  
White Rock Mineral Springs Co.  
L C Smith & Corona Typewriters Inc  
The Texas Company  
Beech-Nut Packing Company  
Hartford Fire Insurance Company  
Hartford Accident and Indemnity Co.  
Brewing Industry Foundation  
International Silver Company  
Thos. Cook & Son—Wagons-Lits Inc.  
General Electric Company  
Pepsi-Cola Company  
General Baking Company  
The Permutit Company

**Newell-Emmett**  
COMPANY

*Advertising Counsel*  
40 EAST 34th ST., NEW YORK

### Trichlorethylene (METAL DEGREASING) Replacement

New emulsifying and digestive solvent. Rinses with hot water. More effective for shell cleaning and ammunition components. Bare metal clean... no rust.

Write for Catalog Engineering Data Sheets  
**THE CUPRAN CORPORATION**  
MANUFACTURING CHEMISTS Malden, Mass.



### CHAIN LINK PROTECTION FENCE



NON-CLIMBABLE permanent protection for FACTORIES, POWER PLANTS, PARKING LOTS, etc.  
HEAVY, STURDY CONSTRUCTION. Lowest cost-per-year.

Expert erection service. Recommendations and estimate without obligation. Write for catalog.

**INTERLOCKING FENCE CO.**

For 25 years, makers of Protection Fence  
400 W. ADAMS MORTON, ILLINOIS

day shifts or day and night shifts) will continue to be the best system that can be arranged."

#### Has Britain put a ceiling over wages?

No. When the government last fall recommended that wages should be controlled as an essential part of the country's price control program, the Trades Union Congress replied officially that it was unfair to make further increases in wages depend entirely on increases in output. It pointed to the development which had taken place in controlling profits, stimulating increased saving, stabilizing the prices and rationing of food and other commodities, and argued that inflation could be avoided in this way without artificially controlling the rise of wages.

The [London] Economist, representing an important and increasingly vocal group in Britain, stated the other side of the issue in its Dec. 20, 1941, issue:

"In wartime there may often be grounds for increasing earnings for vital work or for higher output to attract recruits from unessential employment or to encourage extra effort. But there is practically never any case for increasing basic wage rates. An effective wages policy, introduced in the early stages of the war, would have frozen wage rates all round, in nonessential work even before essential, and then by piece rates, temporary wartime bonuses, overtime pay and other additions, would have permitted earnings to rise in the essential industries at the points where incentives to attract more workers or to step up production were most needed."

#### What has happened to British wages during the war?

Basic wage rates have increased by 26%, compared with a rise in the cost-of-living index of 30%. But average earnings of British workers—due to big overtime payments—had increased 42% up to July, 1941. No official figures have been released since then, but there has inevitably been some decline in earnings because of the reduction in overtime work from last year's excessive levels.

#### On what basis is overtime paid?

Just as British "standard" working schedules have not been appreciably altered since prewar days, so also do overtime pay rates remain virtually unchanged despite the tremendous amount of overtime being worked in almost all industries. Time-and-a-half has usually been paid for the first 30 hours per week in excess of "standard" weekly hours. In some cases overtime is computed by reference to standard daily hours, in which case time-and-a-half is usually paid for the first four hours of excess daily working time. (Computation of overtime on a daily basis naturally increases the amount of overtime if production is subject to interruptions, as



Once regarded as a most unladylike vocation, smithing is one of the trades British girls learn in the Auxiliary Territorial Service at army camps.

during air raids.) Additional overtime, if any, is paid at time-and-three-quarters or double rates. Sunday work has almost invariably been paid at double rates. Generally speaking, British workers are paid during idleness caused by air raids.

Since May, 1940, the government has possessed power to increase hours, control wages, and even to conscript labor. Nevertheless, aside from governmental suasion to lengthen hours, these working schedules and overtime arrangements are still negotiated by collective agreement between employers and unions, except in the case of some poorly organized, low-wage industries, and in agriculture, where they have been fixed by governmental trade boards.

#### Is labor free to shift from job to job?

In "essential" industries, no. Essential industries are defined by the Ministry of Labor, include now mainly munitions, shipbuilding and repair, coal mining, and war equipment. (On July 18, 1941, when the order was fully enforced, the government reported that 10,409 businesses were officially classified "essential.") In these specified firms, employers may not discharge employees, except for serious misconduct, and employees may not quit except with the consent of a National Service Officer and on one week's notice.

What moves have been taken to prevent labor pirating and to set up a system of labor priorities?

The Control of Employment Act of 1939 ordered employers in Great Britain

## Germ Warfare on the Home Front

Deadly bacilli of the black plague, dropped from Japanese planes on the villages of China, are not the only bacterial threat to the United Nations' cause.

Microbes which multiply by millions in fresh foods of every kind, may cause serious loss through spoilage... and menace the stamina of our fighting forces, the health and well-being of our civilian population.

Refrigeration is our most effective weapon against this threat to our food supply... controlled cold which prevents growth of the bacteria of decay, keeps foods pure and wholesome in their original freshness and flavors. On trucks, trains, ships... in warehouses, restaurants, institutions... refrigeration is constantly on guard. The food merchant in your neighborhood depends on it to preserve his stocks and protect your health.



Because commercial refrigeration is so vital to our victory, so important to national well-being, Penn is continuing to provide the automatic controls required to maintain the service of this industry. At the same time, we are devoting our research and production facilities without stint to direct work for our armed forces. *Penn Electric Switch Co., Gosben, Indiana.*



REFRIGERATION. AIR CONDITIONING. ENGINE

HEATING. PUMPING AND AIR COMPRESSOR

## THE PLANES THAT SAVED ENGLAND...



Plotters in action at filter board of a typical Information Center, keep track of approaching enemy aircraft, receive and relay information by telephone.

In the battle for Britain, one plane on ground alert proved equal to sixteen on patrol. Sent up to intercept already located raiders, it nullified the Nazis' tremendous numerical superiority. Thus the small but efficient R. A. F. beat off Luftwaffe leaders... a victory made possible by the telephone.

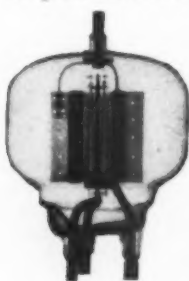
Within a stone's throw of Boston's Old State House, Thomas A. Watson worked away in an attic. As he plucked a spring to set it vibrating, over an electrified wire his employer heard the sound. (Sixty-five years later Herman Goering's flyers felt the effect.)

Through that simple action of his assistant, Alexander Graham Bell verified the principle of electrical transmission of speech. The following Spring, 1876, he spoke the first telephoned sentence...

and secured his first patent.

Use of the telephone increased by leaps and bounds. By 1880,

X-ray photograph of vacuum tube showing Nickel filament... one of many vital telephone applications for this metal and its alloys.



50,000 had been installed... and by 1941 over 23,000,000! Today, except in times of war, almost any one of the twenty-three million American sets can be hooked up with any of nineteen million others in distant lands; and ships at sea, planes in the sky, stations on land, can get in instant touch.

A new dramatic use of the telephone is in our system of air information and command. With key nerve centers tailor-made to fit the army's needs, it gives this country the most efficient of communication units in air defense.

For its great accomplishments and faithful discharge of duty, the telephone industry and its personnel have earned the thanks of the Nation.

Nickel and Inco Nickel alloys, too, are doing their bit. Through their strength, toughness, immunity to rust, freedom from corrosion and other special properties, these durable metals are daily aiding the maintenance and further development of telephonic communication, thus contributing to defense at home and victory overseas.

THE INTERNATIONAL NICKEL COMPANY, INC.  
67 Wall Street • New York, N. Y.

# Inco NICKEL ALLOYS

MONEL • NICKEL • INCONEL • "R" MONEL • "S" MONEL • "K" MONEL • "Z" NICKEL • "KR" MONEL

not to advertise for employees, or hire or rehire workers during the war emergency without the consent of the Ministry of Labor.

The law has not been enforced except in specific industries where special orders were issued after the Minister of Labor had consulted with organized employers and employees. Included, to date, are the war industries, shipbuilding, coal mining, agriculture, forestry.

Does labor have a voice in the making of production policy in individual plants?

Yes, but so far only on a modest scale. In January, 1942, the trade union members of the Central Joint Advisory Committee proposed that joint production committees representing workers and management be set up in factories to study schemes to boost production.

First actual move came in the Royal Ordnance Factories, all of which are owned by the government. Joint committees have already been formed to advise solely on production and efficiency questions, leaving wage and similar questions to the trade unions. All workers over 21, with at least one year's service, elect up to ten representatives. Management selects an equal number of representatives, and the group meets fortnightly.

The engineers' and shipbuilders' unions have similar plans under consideration now.

In what industries are workers exempted from military service?

Technically, a man of military age (18½–51) is "reserved for industry" only if the work he does is essential to the war effort and if no woman, or man over military age, can take his place.

Actually, the occupations in which men are exempted from military service are listed in an official schedule. In key industries exemptions include even men down to 18. In others, where long study and apprenticeship are necessary for real skill, exemptions begin at 25 or 30, or even 35. The schedule is elastic, demanding that the person must actually be doing the essential job for which he is reserved.

With women now being drafted into industry, and with older men becoming available as a result of refresher courses in government training schools, the age of reservation for some occupations will be raised one year every month in 1942, according to a recent statement by Prime Minister Churchill. The question of dependents is not held relevant to exemption.

There has recently been considerable discussion in Britain as to the relative needs of industry and the armed forces for skilled workers. Apart from miners, who are not now taken into the forces, the government is insisting—in response to insistent demands for offensive action

against the Axis—on the prior needs of the armed forces, which has greatly intensified the problems of industrialists.

To what extent are women replacing men in factories?

Britain has had the authority since May, 1940, to conscript women as well as men for either the armed forces or for industry. But, because of a reluctance to enforce the labor draft until the beginning of this year, only 750,000 women who formerly were not employed are now at work in Britain's munitions factories.

There are in Britain 3,350,000 women between the ages of 16 and 24. Of these, about 2,380,000, or over 70% were working before the war. Practically all of the remaining single women in this group are already employed. Accordingly, if the mass of married women who make up the backlog of the remaining age groups are to be coaxed into factories, Britain must create more canteens, community feeding centers (BW-Jan. 31 '42, p40), and municipal nurseries where children can be left by the day. Labor authorities insist that industry must stick to a 5-day week if these women are to work and not create a serious absentee problem.

Women are also demanding "equal pay for equal work." Labor contracts in heavy industry provided for this before the war but in other industries and even in training centers women are usually paid on a lower scale.

The registration of all women between 20 and 30 began in January and was completed Mar. 21. Already 40% of the workers in tank factories are women, and 30% in the aircraft industry. The government, however, has announced that women can readily fill at least 70% of the jobs in the airplane industry and draftees are being trained now in the government centers. London has even predicted that it can boost the number of women workers in the shipyards by 5% to release men for the war or for other heavy jobs. Most of London's subways and buses are now run by women.

The hours worked by women and young persons are subject to statutory limitation to a normal maximum of 48 a week, but from the beginning of the war this limitation has been waived and women still work up to 60 hours.

How does Britain train skilled workers?

Labor authorities, after two and one-half years of war, declare that rapid expansion of the labor force must depend upon (1) bold upgrading of workers, (2) judicious dilution, and (3) establishment of big-scale government training centers.

The apprentice programs of private companies, many of which have been greatly expanded in the last year, have



With the national war effort paramount, American industry today is proving that *substitution* does not mean cheap "Ersatz" . . . that a high degree of quality can be maintained . . . that out of the demands of necessity and the genius of the laboratory are coming new ways to overcome old problems.

The nation has suddenly realized that its peacetime plenty of natural resources, of raw materials, is not unlimited.

To enable industry to supply the basic needs of the civilian population while putting the demands of our armed forces and those of our Allies in first place is, therefore, largely a matter of releasing needed raw materials by the creative use of all available supplies. So, down the line, intelligent substitution creates an ever-mounting total of the stuff of victory.

Atlas Powder has adopted this policy for the duration. Its Zapon Division, for example, is creating finishes based on available materials that do the job—at the same time releasing critical materials which go off to war.

Thus the Atlas Family cooperates with its customers to find new ways to make needed goods, new materials to satisfy the nation's needs while contributing directly and indirectly to the national war effort. From manufacturers so affected, Atlas invites inquiry—there may be a way in which we can help.

ATLAS POWDER COMPANY, WILMINGTON, DELAWARE  
Offices in Principal Cities



The **ATLAS** Family

Explosives • Chemicals  
Coated Fabrics • Finishes  
Activated Carbons

DARCO — ATLAS — ZAPON — KERATOL



## HOW MANY OF YOUR MEN ARE ABSENT EACH DAY?

### Group Wash Fixtures Reduce These Man-Day Losses

Lost man-hours caused by absentees mean lost production which is gone forever,—a loss that very seriously retards our war effort.

Physicians say that one major cause of lost hours is Dermatitis (skin affection) which however can be practically eliminated by proper and regular washing.

Most of our leading industries guard employee health with sanitary Bradley "Multiple-person" Washfountains. Bradleys serve 8 to 10 persons simultaneously—



One of American Can Co. plant washrooms equipped with sanitary Bradley Washfountains.

supplying each with clean, sanitary running water from a central sprayhead. Bradleys save time and space, and reduce water consumption... They cut installation costs, too, because an 8 to 10-person Wash Fountain requires but one set of piping connections, 1/8 to 1/10 as many as required for 8 to 10 "single person" wash basins.

Our Washroom Consultants are ready to give you details and make helpful suggestions. "Washroom Plan Book" will be mailed on request. BRADLEY WASHFOUNTAIN CO., 2225 West Michigan Street, Milwaukee, Wisconsin.

## BRADLEY Washfountains



The sprayhead serves clean running water to each person—the bowl is self-flushing to prevent collection of water and contamination.

not been abandoned and still produce most of the men who become Britain's best craftsmen. But the earnings of craftsmen in Britain traditionally have not been sufficiently above those of semiskilled workers to attract a large number of apprentices.

Though there is a good deal of prejudice in industry against Government Training Center trainees, the number of centers is being constantly increased. In 1940 there were 14 major centers and a group of eight smaller centers, expected to train 40,000 new workers a year. In 1942 the total has jumped to more than 50 centers and, with the technical schools, and the training courses of private employers, they are scheduled to turn out 400,000 a year.

The training period in centers varies from three to five months, except for draftsman for whom 30-week schooling is offered. Emergency training establishments offer a special eight-week course. The trainees are not expected to be skilled, or even semiskilled, at the end of the course, but, if passed, are supposed to be good enough for rapid upgrading after intensive instruction in industry.

Prospective workers are paid during the time they spend at the training center, and special allowances are made to cover board and room if the man trains away from his home.

What has been Britain's wartime experience with absenteeism?

Worker absenteeism is causing considerable trouble in Britain. Tired from long hours and much overtime work, many workers take an occasional holiday during the week and work on Sundays and overtime periods when wage rates are higher.

Main causes listed by British labor authorities are: (1) Inadequate feeding arrangements for long shifts; (2) bad transportation facilities on weekends; (3) widespread objection to Sunday work; (4) reduced incentive caused by rationing and declining supplies of consumer goods in the face of mounting earnings.

Aircraft factories abandoned Sunday work last June due to widespread absenteeism. Industries that reduced working hours by adopting the 3-shift system reported that absenteeism dropped to 10%–12% from the 15%–20% level on the two-shift system of 10 to 12 hours a day. Absenteeism is 60%–90% higher among women than among men.

What special welfare services have been introduced since the war?

The increase in hours worked, coupled with the blackout and air-raid conditions, has brought into prominence the whole question of industrial welfare. Two measures were pushed forward by the Ministry of Labor in the latter



A woman's place in England today is where she will do the most good in the drive for increased food production, even if it's operating a power excavator on a land-drainage job.

part of 1940: refreshments for workers on the job, such as hot drinks throughout the night for men and women on lathe and bench; and communal feeding for factory workers in order to achieve a higher standard of nutrition and to help in the solution of problems arising out of extensive billeting in industrial centers and the breakdown of gas, electricity, and water services through raid damage.

The introduction of proper infirmaries on or near the job and the provision of good medical and nursing facilities were also urged. But, in practice, the canteen has come out as the most important issue. Nearly all well-run factories now have good canteens—many of them so good that chocolate, cigarettes, and plenty of butter and milk (items which are strictly limited so far as the ordinary civilian population is concerned) are found there in plenty. Where there are no good canteen arrangements, protests have often been made. The recruitment and training of welfare officers has been organized by the payment of fees for the attendance of selected candidates at courses arranged by the universities.

Are wartime labor concessions permanent?

No. In January, 1942, a bill, sponsored by the government, guaranteeing to restore normal trade-union practice as soon as possible after the war is over, was passed by the House of Commons. The law specifies that prewar standards and practices with regard to classes of people employable, hours, and dilution of labor shall be restored by employers, where required by the unions, within 18 months after the end of the war.

# V SHIPMENTS "Bound-to-get-there" FASTER



## GUN TURRETS FOR FLYING FORTRESSES SHIPPED IN ACME STEEL BAND-BRACED CARS

Among the bulkier Victory products made "Bound to Get There" by Acme Steel Bands are these machine gun turrets for the mighty flying fortresses. These turrets, after fabrication, are shipped half-way across the continent where they are assembled into the bombers. Damage in transit must be avoided because the turrets are costly and replacement shipments would, of course, involve the loss of precious time which is vital to the nation's security.



"Bigger and more deadly," a new eagle... the four-engined Bomber... takes to the sky.



Six upper turrets are loaded in the opposite end of the same car. Both photographs were taken at destination after a 2,500-mile rail trip. With Acme Steel Band protection, the loadings are assured of safe arrival.



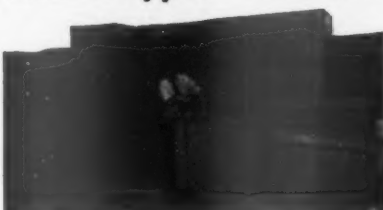
Car door view of one end which contains seven lower machine gun turrets. This unit weighs about 6,500 pounds and is braced with Acme Unit-Load Bands. Note unique bracing method of the small boxes at the right.

The fast, safe and economical shipment of this Victory product demanded careful study of the packing and bracing problem. And as for thousands of other applications... both in war and in peace... Acme Unit-Load Bands were chosen to assure quick delivery and absolute protection. Time is saved in stowing and in the unloading operation. And to prepare the packages for their important places on the assembly lines, it is necessary only to snip the bands.

There is an Acme Process to meet the packing and shipping requirements of your Victory products. Mail the coupon below for complete information.



## ARMY KEEPS WARM IN COMFORTERS SHIPPED IN Steelstrapped CARTONS



Comforters in large quantities for the armed forces are a necessity for the Victory program. In the plant above, production has already reached 1,000 daily—with demands being made for even greater output.

By using Acme Steelstrap, the packing room has been able to keep pace with stepped-up production. Although light in weight, comforters are bulky to pack as will be noticed from the cartons at the right. After the contents are compressed, flaps are sealed and the packages are given complete protection with Acme Steelstrap.

## DEFENSE BONDS GO OVER HEAVY AT ACME STEEL

A big majority... more than 70%... of Acme employees are buying Defense Bonds on the payroll allotment plan. As a result their dollars are doing double duty—assuring safety for their country today and providing security for themselves in the years to come. Savings, of course, are right in the blood of Acme employees. For years they've been making products that have made important savings to shippers in virtually every industry.



## SHIPPERS GET HELPFUL HINTS FROM NEW ACME PUBLICATION



Acme Process News is a new publication distributed at regular intervals by Acme Steel Company. Illustrated, the current issue shows ways in which shipments are being speeded up... how damage claims are reduced and shipping and handling costs lowered. A copy can be obtained by mailing the coupon below.

## ACME STEEL COMPANY

2828 Archer Ave., Chicago, Ill.  
MANUFACTURERS OF ACME STEEL-STRAP, ACME UNIT-LOAD BANDS, ACME CORRUGATED FASTENERS, ACME STRIP STEEL AND OTHER STEEL PRODUCTS.

☐ Send complete information on fast, safe and economical packing and shipping of Victory products.

☐ Mail a copy of Acme Process News.

Name \_\_\_\_\_

Company \_\_\_\_\_

Address \_\_\_\_\_



## THEY FLY THE WEATHER ...WE MAKE IT!

Pilots must take the weather as it comes. But builders of airplanes and other war materials needn't let factory weather limit output. For we make *ideal weather for any industrial process* . . . and the improvement soon pays for itself.

Must you hold finishing operations to close tolerances? *Uniform temperature* will speed your precision work and minimize rejects! Is rust or corrosion a problem? *Humidity control* will lick it! Does air-borne dust plague you? Again, *air conditioning is your solution!*

No two plants have identical air conditioning problems. And usually a plant's *various departments* differ in their weather needs. So your installation should be *tailor-made for you*. That usually means decentralized units, rather than a central system. Advantages: (1) optimum weather for every department; (2) maximum flexibility; (3) *minimum operating cost*; (4) *localization of shutdown* should a unit be damaged; (5) quick, easy installation.

When you plan air conditioning, the counsel of a *locally experienced expert* may help you avoid costly mistakes. You'll find the ideal collaborator in your resident Fairbanks-Morse engineer. His judgment is bias-free, thanks to the completeness of the F-M line. To meet him, simply write Fairbanks, Morse & Co., Dept. D131, 600 S. Michigan Ave., Chicago. Branches and service stations throughout the United States and Canada.



**FAIRBANKS-MORSE**  
Air Conditioners

# MARKETING

## Fight for Life

**Patent medicine producers' struggle for materials shifts to new front as changeover to PRP knocks out hope of priority aid.**

Another chapter in the never-ending fight by militant reformers to put clamps on the proprietary drug industry was brought to an end last week, and a new chapter opened. But new or old, the patent medicines are confronted with same necessity of fighting for their lives against the impact of priorities. Oddly enough, the first chapter was closed by a War Production Board announcement that didn't mention the word "drugs." That announcement was the formal statement that WPB was scrapping all industry-wide blanket rating P orders in favor of the broad, overall Production Requirements Plan (BW—Mar.28'42,p5).

Actually, the proprietary issue was only a detail in the settlement of a much bigger question—the question of what place the whole drug industry should occupy in the war effort on the basis of its contribution to public and military health. But it was a detail around which a lot of fireworks have been exploding.

Last August, OPM issued the Health Supplies Rating Plan, order P-29, which gave three-month blanket priority ratings to the manufacturers of a long list of health supplies (serums, biologicals, surgical tools, and hospital equipment).

• **Only Limited Assistance**—Because the plan included only bulk medicinal chemicals, it could be used only by manufacturing chemists who made the raw materials which the drug industry converts into finished products. For example, a maker of bulk sulfanilamide could use an A-10 rating to get his raw materials, but a drug manufacturer making bulk sulfanilamide into tablets had no such privilege. Broadly speaking, this arrangement gave a break to some drug producers but largely at the expense of patent medicine manufacturers.

In the middle of November, OPM's Health Supplies Branch started work on a series of amendments to P-29 which would have blanketed all "medicinal preparations" under the Health Supplies Rating Plan (BW—Dec.13'41, p24).

• **Resistance at the Top**—When this plan for amending P-29 was sent to top WPB officials for final approval, it ran into vigorous objections from the Chemical Branch, which has always kept a

tight grip on the scarce materials essential to drug production, and the Civilian Supply Division, never too fond of patent medicines. Men in both groups protested that the amendments would permit both the pharmaceutical houses and the proprietary manufacturers to use blanket priority ratings on orders for scarce chemicals. The drug industry itself did not present a united front. Proprietary leaders charged that pharmaceutical interests were at best lukewarm in support of the amendments.

A counter program was proposed under which P-29 would have been amended but only to provide priority ratings to products listed in the United States Pharmacopoeia and the National Formulary, two compendia published regularly by private organizations but recognized as official books of standards in the federal Food, Drug, and Cosmetic Act. This proposal was unacceptable to the proprietary drug industry because many of its widely-used specialty prescription drugs are not included in either compendium.


• **Another Plan Proposed**—Opponents of the patent medicine interests proposed that doctors, public health officials, and pharmacy professors be appointed to draw up a list of essential medicinal preparations, including some,



## CONSERVATION AWARD

Citations for commendable traffic safety records are commonplace, but now that rubber is precious, Consolidated Motor Lines of Hartford, Conn., is awarding a plaque each month to the one of its terminals which does most to conserve tires. Merits are based on such factors as inflation, alignment, braking.

LET'S KEEP TRAINMEN ON THE JOB!



There is no time for half-way measures where the safety of men is concerned. Train service accidents impair operating efficiency and adversely affect the war production effort . . . a man in the hospital is a liability and every effort should be made to keep men on the job!

**WALK-LOCK RUNNING BOARD & GRATE STEPS** are the safe, sensible way to keep freight cars for accident proof operation . . . provide trainmen with a sure footing, prevent slipping, enable men to work without the hazard of falling from or on to the car. The walking surface is corrugated and spaced to provide over 90% open area for self-cleaning even in the most extreme snow, sleet or rain.

WALK-LOCK STEEL CO. CHICAGO

## ★ GLOBE-WERNICKE OFFICE ACCESSORIES ★

### *Speed up work for Victory*



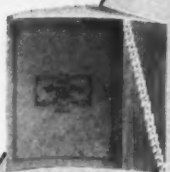
**BOX FILES**  
Made in letter, legal and bill sizes... choice of several styles of indexing. Needed in nearly every office. Often used for personal filing.



**AGATE CARD INDEX TRAYS**  
Made of heavy binders' board... wood bottom... steel follower... 3x5", 4x6", 5x8", 6x9" and check file sizes.



**CLIPBOARDS**  
Often used for holding transient papers. Powerful spring clip is mounted on Masonite or striped wood board... Note, letter and cap sizes.



**EVERYDAY FILES**  
Needed in offices... factory and home... several styles, indexed alphabetically, days of month, etc... Standard and legal sizes.



**TABS HAVE THE NATURAL READING ANGLE OF 45°**  
**ANGULAR CELLULOID TAB GUIDES**  
Easy to see... easy to find... no stooping or bending to read indexing; inserts are removable, changes made easily.

**The Globe-Wernicke Co. . . CINCINNATI, O.**

**JUST OUT**

**WAR PRODUCTION EDITION**  
*of this well-known guide to executive leadership*

**Shows how to deal with problems of:**

- responsibility
- discipline
- executive stimulation
- constructiveness
- self-assertion and self-expression
- leadership
- justice
- analysis of labor requirements
- introduction of the new employee
- difficulties with subordinates
- opposition
- stubbornness
- disloyalty
- dishonesty
- immorality
- irresponsibility
- the agitator
- difficulties with superiors and associates
- responsibility for errors

**See it 10 days on approval**

**SEND THIS COUPON**

## The Technique of EXECUTIVE CONTROL

By ERWIN H. SCHELL, Professor of Business Management, Massachusetts Institute of Technology

**Price, only \$2.00**

**SHOWS** that executive technique is not a mysterious sixth sense, but a quality that can be definitely developed by anyone who will follow the simple methods laid down in this manual. Defines the tools of executive control; outlines the factors involved in the successful handling of others; gives practical and usable methods for getting a maximum output of work with a minimum amount of friction. In this edition a new chapter discussing the influence of the current emergency upon the various techniques of executive control has been added.

McGraw-Hill Book Co.,  
330 W. 42nd St., N. Y. C.  
Send me Schell's *The Technique of Executive Control, War Production Edition*, for 10 days' examination on approval. In 10 days I will send \$2.00 plus few cents postage, or return book postpaid. (Postage paid on cash orders.)

Name .....  
Address .....  
City and State .....  
Position .....  
Company ..... BW-4-4-42



but not all, "official" preparations, certain nonofficial pharmaceuticals, perhaps even some proprietaries. But this suggested compromise left the proprietary interests cold. They could not see any such group of scientists putting patent medicines on a list of essential drugs.

Just before the fight was over, the British and Chinese entered the picture with complaints of their own. The British, apparently piqued over WPB recommendations cutting down on the amount of drugs which they could requisition, protested to the Lend-Lease Administration about any greater domestic generosity with our drug supply. The Chinese were angered at WPB suggestions that they take synthetic atabrine (BW-Mar.14'42,p66) in lieu of Lend-Lease quinine. The British suggested that the U. S. institute a program of restricting the use of drug raw materials to essential products, similar to the English program.

● **Materials or End Products?**—Health Supply Branch officials defended the amendments to P-29 in behalf of the proprietary interests and so-called "ethical" pharmaceutical houses by arguing that it was better to control drug production by making supplies available to all drug producers and issuing specific orders whenever the scarcity situation in any drug became acute rather than by attempting to make up a list of essential end products and thereafter granting priorities on raw materials only to products on such a list.

In support of their plan for issuing specific limitation or allocation orders whenever emergency situations arose, branch officials cited the recent order prohibiting drug use of agar, an emulsifier in popular laxative preparations, and a second order cutting down the daily dosage of vitamin A in capsules from 10,000 to 5,000 units. Also, they issued public statements warning the drug industry that tough times were ahead.

● **On a New Battlefield**—This dispute came to an abrupt end with the shift to the Production Requirements Plan which made an academic question out of the amendments to P-29. PRP is scheduled to supersede all P orders and approaches the problem of distributing scarce raw materials on a company-by-company rather than industry-by-industry basis. Priority ratings for whole groups of manufacturers are out; in their place are specific allocations of materials made to individual companies on the basis of their needs and the value of their end-product to the war effort. Hence from now on, the fight will not be made on broad lines between the manufacturing chemists and the patent medicine makers; it will be localized in terms of Company A. vs. Company B. each struggling for a vital allocation of some critical drug.

Until a number of PRP drug applications have gone through the mill, no

one can tell just how the fight is going to come out, but it's a reasonable assumption that the patent medicine men, whose strength has always lain in their fervent unity, are going to have tough sledding when each of them has to plead his own case separately. Their basic argument must inevitably be that the authorities have no right to deprive doctors and individuals of a familiar drug product, on which they have been relying for years, until the shortage of an essential material becomes acute—and then only if the scarce material is to go into other products whose medical efficacy is beyond scientific question.

## "Marvel" Mixup

Antitrust case hinging on A.&P.'s cut-price bread loaf and alleged agreement with union boomerangs on Arnold.

Trustbuster Thurman Arnold has vigorously indicted the practices of organized labor on public platforms, but he hasn't had much luck in making his charges stick in court. Such practices, he told the House Judiciary Committee, are putting a substantial handicap on the distribution of civilian necessities. The pending legislation to require federal registration of labor unions and trade associations doesn't go far enough, according to the Assistant Attorney General, smarting from defeat of his attempt to turn the antitrust laws against bakery unions.

Charged with conspiring with chain stores to fix bread prices in the District of Columbia, the bakery unions had been indicted several months ago, but the indictments were thrown out of the federal district court last week by Judge Alan T. Goldsborough.

• **A. & P.'s Problem**—Although American Stores, Acme Markets, and the Sanitary Grocery Co. were all named in the original indictments, the case really revolved around the Great Atlantic & Pacific Tea Co., its public relations counsel, Carl Byoir and Associates, and the labor relations firm of Chester Wright and Associates, which Byoir retained in 1938 to help solve A. & P.'s troubles with the Washington bakery unions.

The bread which A. & P. distributes in Washington comes from its bakery in Baltimore, where wage rates three years ago were much lower than those prevailing in Washington. Unions in the District feared that as a result of these lower wage scales A. & P. could flood the area with low-priced bread which would put their high-wage contracts with Washington bakers in decided jeopardy. Hence, the unions demanded that A. & P. either move its

# ★ AMERICA ★ ★ WORKING ★



Spinning "electrical nerves" for our fighting machines! He's operating a cable-insulating machine at the Okonite Company plant, where R & M hoists are helping to speed production.

## • • R & M helping • •

**R**EELS of metal cable weighing a ton or more may be easy to roll. But lifting and spotting them in precisely the right positions for spinning and insulating is another story! Okonite engineers trust these jobs to a squadron of R & M electric hoists—increasing output and saving vital time.

★ R & M hoists and cranes—in 2000 sizes and capacities, from 500-lb. bantams to 7½-ton huskies—are helping countless plants, in every war industry. So are other R & M products... patented Moyno Pumps that pump the "unpumpable"; motors that have set performance standards for 50 years; drives that multiply the capacity of old and new machine tools; fans and ventilators that keep workers "humming" at peak efficiency.

★ Yes, we are busy with war work... busier every day. But our expert representatives are ready to help you find the solution to your material-handling problems. Write us. The address, since 1878, is Robbins & Myers, Inc., Springfield, Ohio.



MOTORS ★ HOISTS ★ CRANES ★ FANS ★ MOYNO PUMPS

bakery to Washington or pay the Washington wage scale.

● **Purely Tentative**—At that time the chain was entering preliminary negotiations for a contract in its Baltimore bakery, and to expedite the negotiations, one of Wright's associates contrived a "memorandum of tentative agreement" in which the Washington unions were to agree to take A. & P. off their "unfair" lists, provided the chain proceeded with its Baltimore negotiations within the meaning and spirit of the Wagner Act and also guaranteed not to resort to "loss leader or less-than-cost sales" in the Washington area. If the chain failed to reach satisfactory union agreements in Baltimore or if at any time it failed to maintain prices in Washington, the unions "reserved the right to retract approval of the A. & P. stores."

The stop-gap agreement was never initiated, either by the chain or by the Washington unions, and with the conclusion of a Baltimore contract the whole problem seemed to be washed out. But in 1940, when A. & P. put on the market a special loaf of bread called "Marvel," retailing at the cut price of 5¢ a pound, the unions dug out the "memorandum of tentative agreement" and made much talk about A. & P.'s "promise" not to shave prices. Disavowing that promise, the chain stated: "It is the absolute and unqualified rule of this company never to be party to any price-fixing agreements or understandings. Such agreements clearly violate the antitrust laws."

● **Under Suspicion**—High-sounding as these sentiments were, Arnold apparently considered them suspect; if the chain's practice was as good as its preaching—if that tentative agreement had been really only tentative—the chain would simply have ignored the union's protests. That was the basis of his argument when he hauled the unions and the chains into court, and to back up his contention he could point to the fact that when the bakery drivers refused to haul the 5¢ loaf, A. & P. removed it from the market.

Justice Goldsborough rejected the government's contention that evidence of conspiracy lay in the fact that the A. & P. had been "foolish enough to answer" the letter from the union.

"If that were true," he said, "none of us would be safe under any circumstances. Any enemy of ours by writing a letter could bring us into court."

In disposing of the indictment, including the government idea that any changes that had occurred in bread prices during the two years in question constituted conspiracy instigated by the unions involved, the court also said that the government's case consisted of "a series of disconnected incidents none of which mount up to legal evidence, and the total substance of each of which is consistent with innocence."

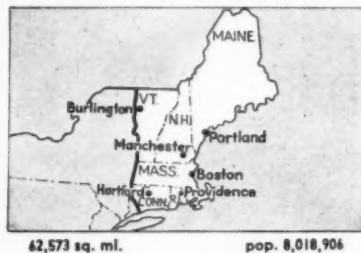
## The Regional Market Outlook

**BOSTON** (Income Index—150.5; month ago—146.4; year ago—119.8)—Despite curtailment of nondurable goods operations, resulting from reduced imports of wool, silk, rubber, hides, sugar, etc., New England income continues in an uptrend. The reason: Expansion in armament and related lines will require an additional 100,000 workers during the next six months.

Machine shops, foundries, and machine-tool plants still are hiring. And

since conversion to war has been under way for some time, dislocations in shoe and textile machinery, radio, typewriter, and business-machines lines will be held to a minimum; and payrolls will reach new peaks all the sooner. Waterbury Clock is putting up a new plant to handle orders for precision instruments.

The sales outlook along Boston Bay's south shore is steadily improving. A huge new shipyard is under construction at Hingham; shipbuilding is accelerating at Quincy, and other war work is on the upbeat at South Weymouth, Hanover, and Cohasset. Recent military projects—at Providence and Newport, R. I., and Falmouth, Mass.—have helped to relieve the decided consumer-goods accent in the Providence-Fall River-New Bedford area. But this week, Providence-Attleboro jewelry factories will lay off more workers as metal supplies go under stricter limitations; facilities are not readily adaptable to arms work.



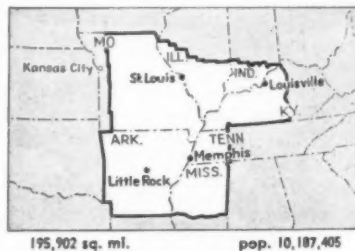
**ST. LOUIS** (Income Index—159.1; month ago—156.0; year ago—123.7)—Awards for industrial construction projects continue to flow into this interior Reserve district, and income prospects are still rising above the nation's.

New steel and ordnance facilities are being built in and about this city, and employment will jump at least 50,000 this year. Now Paducah, Ky., with a new chemical plant, joins the potential "hot spot" towns—Marion, Ill.; Henderson, Ky.; Evansville, Ind.; etc.—which stretch out on a line between this city and Louisville.

And the arms stimulus is spreading through Arkansas. Small plants are going up at Stamps, Glenwood, Batesville, and perhaps 50,000 or so workers will be needed in the state over the next nine months. Ordnance expansion continues around Memphis.

Rural prospects are looking up, too. In the north, livestock and dairy pro-

duction is at least keeping pace with the national average; in Missouri, for instance, corn acreage will be up 15%. In the south, primarily in the Mississippi Delta region, but also in Arkansas, plantings of long-staple cotton will be boosted, now that premium payments have been increased sharply. Kentucky rural sales, jolted out of the doldrums by banner burley receipts a few months back, still are running high—1942 tobacco acreage will be up slightly.



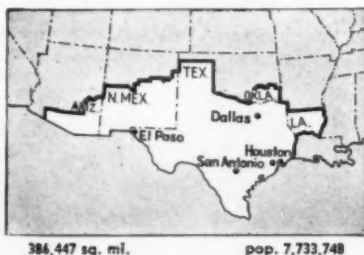
**DALLAS** (Income Index—158.6; month ago—157.4; year ago—129.5)—Accelerating war activity continues to drive payrolls up in this Reserve district, especially in eastern boom towns, stretching along the Gulf Coast from Beaumont to Corpus Christi, north through Austin to Dallas, and east again through Shreveport, La.

Construction awards for both military bases and factories are still mounting, with the most recent major projects

going to Amarillo, Waco, and Temple.

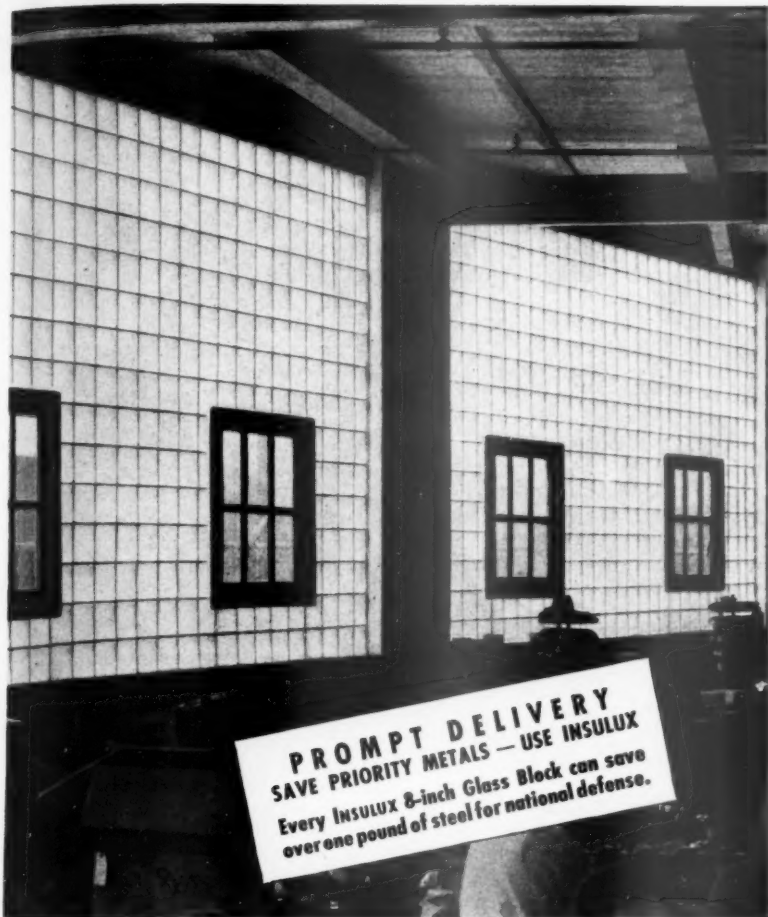
Oil is a dark spot in the picture—particularly for East Texas and the Houston area. Impending gasoline rationing will intensify the reduction in consumption caused previously by the tanker shortage and tire rationing. With stocks piling up (BW—Feb. 28 '42, p. 49), Texas oil fields have been ordered to shut down 18 days this month, thus curtailing production 30%; refining activity already is off 20%.

Cotton planting is just about completed throughout the district, and chopping has begun in southern Texas. Panhandle wheat and oats have come through the winter better than expected. Soaring wool prices are having a bonanza effect in the sheep country northwest of San Antonio, and, since range conditions are good, cattlemen all through the west also expect to cash in. Herds of both sheep and cattle are up more than average over a year ago.



# SAVE TIME—SAVE METAL

By Replacing Windows with **INSULUX** Glass Block



**PROMPT DELIVERY**  
**SAVE PRIORITY METALS — USE INSULUX**  
 Every INSULUX 8-inch Glass Block can save  
 over one pound of steel for national defense.

For window replacement or new construction, one building material is tailor-made for today's conditions—INSULUX Glass Block.

Glass block is readily available. Large field stocks insure prompt delivery. Your factory maintenance men or any competent mason can install it quickly.

There is no need to delay window improvements. The new INSULUX method for framing glass block panels without metal is practical... works almost anywhere... permits combination block and window construction where vision or ventilation is required.

This technique assures fast construction plus the low maintenance and better lighting that INSULUX

brings to factories everywhere.

The new Details Book tells how to install INSULUX Glass Block without metal. Have your architect or engineer send for it today.

**OWENS-ILLINOIS**  
**INSULUX**  
*Glass Block*



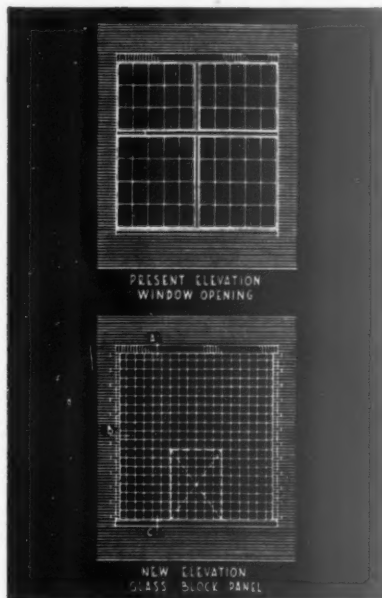
OWENS-ILLINOIS GLASS COMPANY,  
 INSULUX Products Division, Dept. 40, Ohio Bldg., Toledo, Ohio.

Gentlemen: Please send me, without obligation, your free book on "How to Install Glass Block *Without* Priority Materials."

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_



**YOU SAVE METAL**—INSULUX panels can be built with little or no metal. And every 8-inch INSULUX Glass Block used in this way can save over one pound of steel for America's defense. A Texas textile mill reported a saving of 9100 pounds of steel by an INSULUX replacement program that required only 300 pounds of metal in anchors and ties.



**YOU PROTECT WAR WORK**—Translucent but not transparent, INSULUX provides generous daylight, protects fine machinery by keeping out dust, helps guard military secrets from prowlers. A safeguard against sabotage, too. It takes a hard blow from a heavy sledge hammer to break open an INSULUX panel.

The "MOSTEST  
for the LEASTEST"



Yes, Suh! We know exactly what that means — it has long been the watchword in Norfolk and Western territory. And now, it rings throughout the entire nation!

When buying coal, bear in mind that Fuel Satisfaction, the superior coal mined along the Norfolk and Western Railway, is high in heat units and low in residue — thus economical. It burns freely without releasing objectionable gases and is equally efficient in hand-fired and stoker installations. It stocks well, and because the coal fields in which it is mined are served by an unexcelled rail transportation system, it is available in any quantity at anytime.

Buy, stock, sell, and use the coal that is in fact, not just ordinary fuel, but coal that is all-purpose Fuel Satisfaction — coal mined along the Norfolk and Western Railway — get "the mostest for the leastest!"

The railway's Coal Traffic Department at Roanoke, Va., or any representative of the Traffic Department, located strategically throughout the country, will be glad to furnish additional information about Fuel Satisfaction.



**NORFOLK and  
WESTERN  
Railway**

CARRIER OF FUEL SATISFACTION  
CORP. 1942 N. & W. ST.

# PRODUCTION

## QMC Conserves

Army's buyers set example in saving of time and materials by readjusting their specifications to meet war's practicalities.

One branch of the service that was able to take the abolition of "layering" in its stride was the Quartermaster Corps. In case your military vocabulary doesn't include the term, "layering" was officially defined, in the order doing away with it, as the practice under which "a subordinate charged with a task in one organization or subdivision thereof must go up through the layers of his superiors, across from the top of his agency to the top of the other agency, and then down through the layers of the other organization" to reach the man he wants to do business with.

•That's Not the QMC Way—Under the realistic direction of the Quartermaster General, Maj. Gen. Edmund B. Gregory, such practices had been discarded by the QMC long before the recent "delaying order" was issued by Undersecretary of War Robert P. Patterson and WPB Chairman Donald M. Nelson.

No officer or assistant of one QMC division who wants information or action from someone in another QMC division needs to layer his request. He need not go through the tedious routine of writing to his captain, who in

turn writes to the major, who in turn writes to the colonel, and so on. Instead, he just grabs the phone.

•Saving Materials and Time—What's more, every military and civilian member of the far-flung QMC—with its gargantuan job of feeding, clothing and transporting by motor our entire world-wide Army establishment—has been coached and re-coached in the conservation both of materials and time. Both of these vital elements are the responsibility of the Quartermaster General's Planning and Control Division under the leadership of Col. Guy I. Rowe and his hard-hitting aides, Col. Hugh B. Hester and Lt. Col. Georges F. Doriot.

Early last summer, when a good many civilian manufacturers were still getting almost normal quantities of critical and strategic materials, colonels Rowe and Hester foresaw at least a part of today's stringency, expanded the scope and manpower of their work on the conservation and substitution of materials.

•From Civilian Life—To head up and organize the work, they requested Quartermaster General Gregory to call in engineering-minded Lt. Col. Doriot from QMC Reserve and his dual peacetime work as industrial consultant and Harvard Graduate School of Business Administration's professor of manufacturing. He began active duty on his new assignment July 26, 1941.

By Sept. 30, QMC had issued its oft-quoted "Circular Letter No. 255" on the conservation of critical materials with this far-sighted sentence: "By eliminating or reducing the use of such



The Office of the Quartermaster General maintains sample rooms to help suppliers—and the QMC—visualize the multitude of requirements under

its wing. Here, in the Washington sample room, two officers discuss the new Army mess kit which will be made of steel, not aluminum.



## More Tons More Miles ... with the aid of VALVES!

WITH battlefronts thousands of miles distant—with the *entire* Nation a beehive of war activity, clamoring for raw materials, manufactured parts, and finished products, *tons and miles* become equally significant measures of production capacity. Today, American railroads are hauling more *tons* more *miles* per day than ever before.

As in any power plant, pipe lines are the *arteries* of a locomotive. They give it *life* and *power* with water, air, oil, and steam. Valves are needed to regulate the flow of these fluids.

Railroading typifies the important function of valves in every industry's piping systems—in generating light and power—in processing raw materials—in making finished products, whether bombers or battleships, bacon or butter. Valves give *control* of the speed and quality of production; they *must* be dependable!

Any wonder so many leading industrial plants standardize on Crane valves and fittings—whose quality and design have been proved and constantly improved since 1855?

### CRANE "AID-TO-VICTORY" SERVICE

Attainment of today's production goals requires keeping pipe lines working without interruption. To help your plant keep going, Crane offers a practical Shop Bulletin service designed to aid your maintenance crews in properly installing and caring for valves, fittings, and piping equipment. They also help you train new maintenance workers.

This Shop Bulletin service is free. Your Crane Representative will gladly supply it. Call him today.



# CRANE

CRANE CO., GENERAL OFFICES:  
375 S. MICHIGAN AVE., CHICAGO  
VALVES • FITTINGS • PIPE  
PLUMBING • HEATING • PUMPS

NATION-WIDE SERVICE THROUGH BRANCHES AND WHOLESALERS IN ALL MARKETS

## WHAT A DIFFERENCE WHEN CARBON PAPER STAYS FLAT



When buyers discover what curled carbon costs in time and temper their typists get DAWN. Clean. Easy to handle. DAWN stays flat. Makes clear, beautiful, permanent copies. Test DAWN. Write for free samples, Dept. B-11, OLD TOWN RIBBON & CARBON CO., Inc., 750 Pacific St., Brooklyn, N. Y.

**Old Town**  
RIBBONS  
CARBONS

ASK YOUR OFFICE SUPPLY DEALER



## "PULLING TOGETHER" means "PUTTING TOGETHER"

To produce the material needed to win this war, American industry is being turned into a gigantic assembly line. This huge job requires the manufacturing and handling of thousands of small parts, stampings, castings, and small pieces. How these are handled is vitally important! Inefficient, time-wasting methods definitely impede the forward movement of our entire effort.

In many instances Lewis Trays have proved to be the "out" that has been sought. They offer the advantages of unusual strength, combined with light weight, uniform size, space-saving stackability, and adaptability to your manufacturing methods.

Check over your "small parts" handling. Perhaps Lewis Trays or Skid Boxes are what you need. Write today for information.

G. B. LEWIS CO., Dept. W4, Watertown, Wis.

**LEWIS**  
INDUSTRIAL CONTAINERS

materials before actual difficulty is experienced in their procurement, shortages may be prevented and prompt delivery for more essential purposes assured."

• **Leading the Way**—Since then, while many gadget manufacturers continue to use various critical materials in their nonmilitary products, QMC has tossed out aluminum (all except one small tying device on the Army pack saddle), and a substitute is being sought for that.

Mess kits and canteens are now coming through in plain or enameled steel, not aluminum. And work is under way to make them out of a noncritical plastic. Field ranges have been switched from aluminum alloy and stainless steel to plain black iron.

• **Rubber Freed**—By reducing the crude-rubber specification for the tires, tubes, and flaps for the specific tire procurement program from Mar. 1 to Dec. 31, 1942, both by reducing certain tire cross sections and utilizing reclaimed rubber, QMC is making available to other services some 70,000,000 lb. of crude-enough to equip each of 35,000 medium (28-ton) tanks with a rubber track and a spare.

Incidentally, all 38 plants of 26 tire makers have furnished complete tabulations of their facilities.

• **A Master List**—All these facilities have been classified and charted into one big master list, from which all tire purchases and deliveries are scheduled. "No use sending an order for x-sized tires to Maker A when all his x-sized molds are in use; better to shoot it to B or C or D, whose capacity is open on that item," says QMC, the largest buyer of tires and other rubber products in the world. "And don't think we're not getting on-time deliveries."

Tin was on the "Class B List" ("materials becoming more difficult to obtain and their use should be conserved") before Pearl Harbor, not on the Class A List of materials "considered extremely critical," like magnesium, aluminum, nickel and all the 25 others.

• **Experimental Work**—Yet before that time, QMC was experimenting with electroplated tin cans, Bonderized cans, fiber cans, etc., to replace time-honored dipped-tin containers for packing foods that must withstand all kinds of climatic conditions.

Upshot is that dry foodstuffs like cocoa, hard candy, gelatine pudding powder, baking powder, etc., will be packed in composite fiber containers with metal ends, similar to those used for 75-mm. shells. If dehydrated foods require a "gas pack" to maintain their flavor, they will go into 5-gallon tin containers; if they require no gas, they will go into fiber. QMC used to insist on wooden boxes for carrying canned foods, uniforms, what-have-you. Now the suppliers have a choice of nailed wooden boxes, wire-bound wooden



## EGGS FOR ENGLAND

Wartime arithmetic: 18 cases of shell eggs equal, after dehydration, one barrel of egg powder. This month government buyers placed orders for more than 6,000,000 lb. of egg powder (which will require 228,000,000 eggs) for lend-lease shipments because, compared to shell eggs, it is an ideal voyager, being compact and practically immune to the hazards of breakage or spoilage. First step in processing of powdered eggs is the mixing together of whites and yolks. (In powdered egg-whites, an important lend-lease item, obviously, this step is omitted.) This mixture is then sprayed through atomizing nozzles into a 400 degree F. drying compartment. The dehydrated mixture is then sifted and packed.



boxes, or fiber containers for hard goods.

No more felt campaign hats are being procured (there are some still in the warehouses for the cavalry), because of the shortage in imported rabbit fur. Cork tropical helmets will now be superseded by pith helmets, because cork is likewise imported.

• **Leather Heels**—Rubber heels on Army shoes will be forced to resign in favor

of leather heels with metal inserts unless experiments with plastic heels prove successful. If they do, there will be plenty of material because it will be a harder version of the same material used as the shatter-proof filling in safety glass.

Cotton duck and other textiles are being conserved in a variety of ways. Simulated leather (utilizing a more plentiful textile as backing) will shortly replace olive drab duck as an upholstery material in Army peeps, jeeps, and trucks. Wool uniforms, overcoats, and blankets may possibly use reworked wool, will more probably use a lower and more plentiful grade.

• **Carded Fabrics**—Cotton shirtmakers will be permitted to use carded fabrics instead of combed fabrics to reduce the strain on long staple cotton and facilities for combing. Both are badly needed in fabrics requiring great strength, as in parachute harness and tire cord. Wood cylinders will again wash clothing in laundry machinery instead of the monel or stainless steel of recent years.

All down the line, QMC is cooperating with WPB's Bureau of Conservation, the Navy, the Maritime Commission, and other Army services and suppliers, not only to conserve materials for military uses but to relieve the strain on civilian needs. The sum totals of savings are huge, will be passed around. Negotiated purchases, which require no advertising for bids and the subsequent time lag in rounding them in, are speeding procurement in every QMC depot.

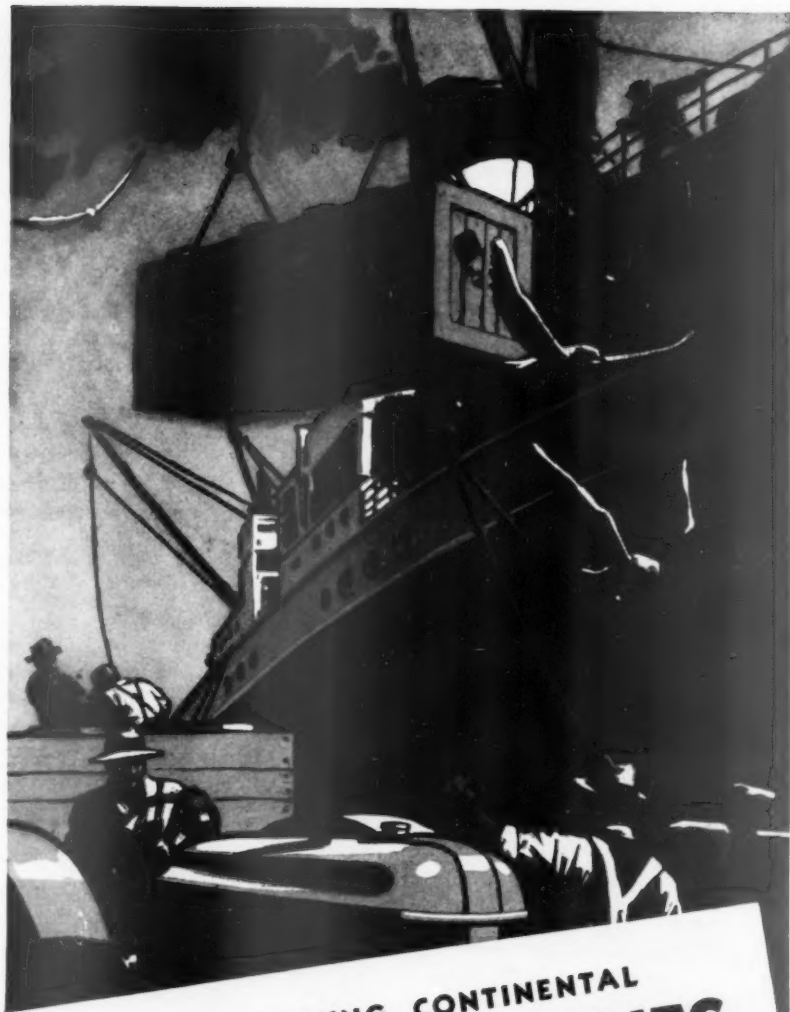
• **Tip from a Veteran**—To equipment manufacturers, food producers and other firms and individuals, that have never done business with QMC before but are now looking for orders to replace lost civilian business, one veteran QMC contractor has this to say:

"Don't turn a wheel or make a commitment for new equipment until you have consulted QMC about requirements. Their officers have had to plan for the long pull. They must have absolutely reliable suppliers. Many items of their long list of needs are fully contracted for. If you think you can produce something they do need and that your organization can qualify financially and morally, they'll be glad to hear from you and work with you 100%, if you qualify."

## Steel for Planes

Aluminum replacement in all noncombat aircraft seems definitely on the way, even if Army is loath to admit it.

Planes are the big users of aluminum; so, for really saving aluminum, nothing beats conserving it in the design of airplanes themselves. This is a thing the



## WAR-WINNING CONTINENTAL RED SEAL ENGINES ON THE JOB FOR AMERICA

Continental Red Seal Engines are in action on War-Winning jobs for America. Wherever dependable power is required, there you will find Continental Engines. Power for ship loading hoists — power for hundreds of industrial purposes. Power for building and maintenance of highways. Power for agricultural expansion. Power for tanks, jeeps, and aircraft. In every field of War-Winning work — on land, sea, and in the air — there is ever-increasing dependence on dependable Red Seal Engines.



**Continental Motors Corporation**  
MUSKEGON, MICHIGAN

## He was a live wire at Acme...but he must have lost his spark!



"I CAN'T UNDERSTAND why Carr can't get the hang of things. With his record, I thought he'd jump right in and take hold. But he seems confused and rattled. Always asking questions about details you'd think he'd have down pat. And he's made a couple of serious mistakes. I'm disappointed."



"WE'VE BEEN UNFAIR to Carr. Our routine is a mystery to any new man because we haven't got it down in black and white. We can clear up that confusion with up-to-date printed forms. Forms that answer the who . . . what . . . where . . . when . . . how of every job. This Hammermill book shows the kind we need. A little help from our printer and we'll get better work from new men and old timers."

TO SPEED UP YOUR OFFICE WORK, Hammermill offers two free booklets: . . . How to avoid "junk heap" desks . . . How to get information, pass along orders and instructions, check results and responsibility. Send for these free books now!

**21 WAYS TO KEEP A CLEAR DESK**

**HAMMERMILL**

*Papers for Office Use*

**BOND • DUPLICATOR • INDEX-BOND**

**HOW TO DESIGN A BUSINESS FORM**

Hammermill Paper Company, Erie, Pa., Dept. BW 4-4  
 Please send "21 Ways to Keep a Clear Desk" and "How to Design a Business Form."  
 If you use an office duplicator, check kind: ☐ stencil; ☐ gelatin; ☐ spirit.

Name \_\_\_\_\_ Position \_\_\_\_\_

(Please attach to your company letterhead)

air force and plane manufacturers have been working on for months.

It looks now—though the Army doesn't like to admit it—like most of the aluminum will have to be eliminated from noncombat types of aircraft—trainers, transports, etc. One stainless-steel trainer has been in small-scale production at Fleetwings for some time, and RFC's Defense Supplies Corp. has been playing with a steel cargo plane for the South American market.

• **New Developments**—Last week two long steps toward elimination of aluminum were made public. The standard advanced trainer plane for this country and England—the North American AT-6A—is going over to wood and steel (BW—Mar. 28 '42, p18). Curtiss-Wright is preparing to get into production on the Army's plywood transport plane.

The Army program runs heavily to transports, so savings here are important. The Curtiss-Wright job is still in the hush-hush stage, but it is permissible to talk about the North American project.

Already in production is an advanced trainer with a wooden rear fuselage. The wood section is being built under subcontract by a furniture manufacturer. At North American, tooling is now under way to complete the change by substituting steel for about 1,000 lb. of aluminum. Wood takes the place of an additional 250 lb., for a total aluminum saving of 1,250 pounds or about 75% of the aluminum components.

• **Saving Alloy Metals**—Unusual feature of the North American development is that it stays clear of high-alloy stainless steel—which is pretty nearly as scarce as aluminum. Instead it uses a low-alloy steel on which the yield point has been raised by a cold-rolling process developed by Carnegie-Illinois and U. S. Steel. Special coatings to prevent corrosion are necessary.

Not only does the new construction save aluminum, but it considerably speeds manufacture by facilitating use of spot-welding. Welding the aluminum alloys used in plane manufacture is pretty tricky. Yet welding is desirable because elimination of the rivet-head drag gives an aerodynamic advantage.

Sacrifice involved in the substitution is not too great—a weight increase of some 3%—150 pounds. And even this may not be permanent, since the steel companies expect to improve their process enough more to take up this percentage. Moreover, the plane now in the works is the result of a more or less mechanical substitution of one material for another. If the plane were redesigned from the wheels up with the idea of getting the most out of the steel, further savings could probably be made.

A major factor making the new program possible is that production of the AT-6A is on a very large scale, and the model is frozen with practically no design changes.

## War's Timepieces

Clock and watch makers, up to their ears in work for Army and Navy, find most serious shortage is in skilled labor.

The news that Waterbury Clock Co., maker of Ingersoll watches and Waterbury clocks, will shortly stop production on virtually its entire line of civilian goods to devote full time to war work points up the wartime importance—and problems—of the watch and clock industry. Today there is scarcely a watch or clock maker of any size in the country who is not deluged with war orders.

• **Scope of the Job.**—These orders cover all sorts of military precision instruments as well as timepieces—from Navy chronometers (considered by watchmakers the most accurate portable timepieces made) to shell timers. Parts and mechanisms for airplane instrument panels are a particularly heavy item of production with the industry. The Elgin National Watch Co., for example, has had for some time a separate aircraft instrument department.

Obviously, war work is taking its toll of commercial watch production. Watch manufacturers are traditionally mum about their business and war activity is making them more close mouthed than ever. The general observation is, however, that the cuts in civilian output are now going very deep. The War Production Board has ordered no direct curtailment of watch and clock production, and Waterbury is the first company to announce complete conversion, but most makers are believed to have reached informal agreements with Washington as to the amount of their regular production. The government evidently is taking the line that watches are at least semiessential to the civilian economy.

• **Supply Situation.**—Unusually heavy production before war orders started piling up makes for a bigger supply than might be expected. Most manufacturers increased output substantially in 1939 and 1940. A survey among wholesalers, by the publication *Jewelers' Circular-Keystone*, indicates that the current tightness in supply is largely synthetic, the result of over-ordering by retailers who know they will not get all they ask for and are getting around this by asking for more than they really need.

Production of clocks and cheaper, nonjeweled wrist and pocket watches has suffered most because of shortages of critical metals—nickel, brass, steel. Finer watches use less of these, more of the less strategic precious metals. The chief limitation upon the output of the three biggest U.S. makers of fine watches—Elgin, Hamilton, and Waltham—is the

## CONCRETE STRUCTURES

*help*  
win the war!



### Built for Peace

Familiar concrete structures such as roads and streets, bridges and dams, railway terminals and docks, warehouses and factories, are adding immensely to the speed, efficiency and productiveness of our war mobilization.



### Designed for War

Air bases, army depots, ammunition storages, camp buildings, defense plants, access roads and other military works are demonstrating anew the versatility and economy of concrete.

Concrete helps conserve critical materials, requires minimum transportation. You'll find that strong, du-

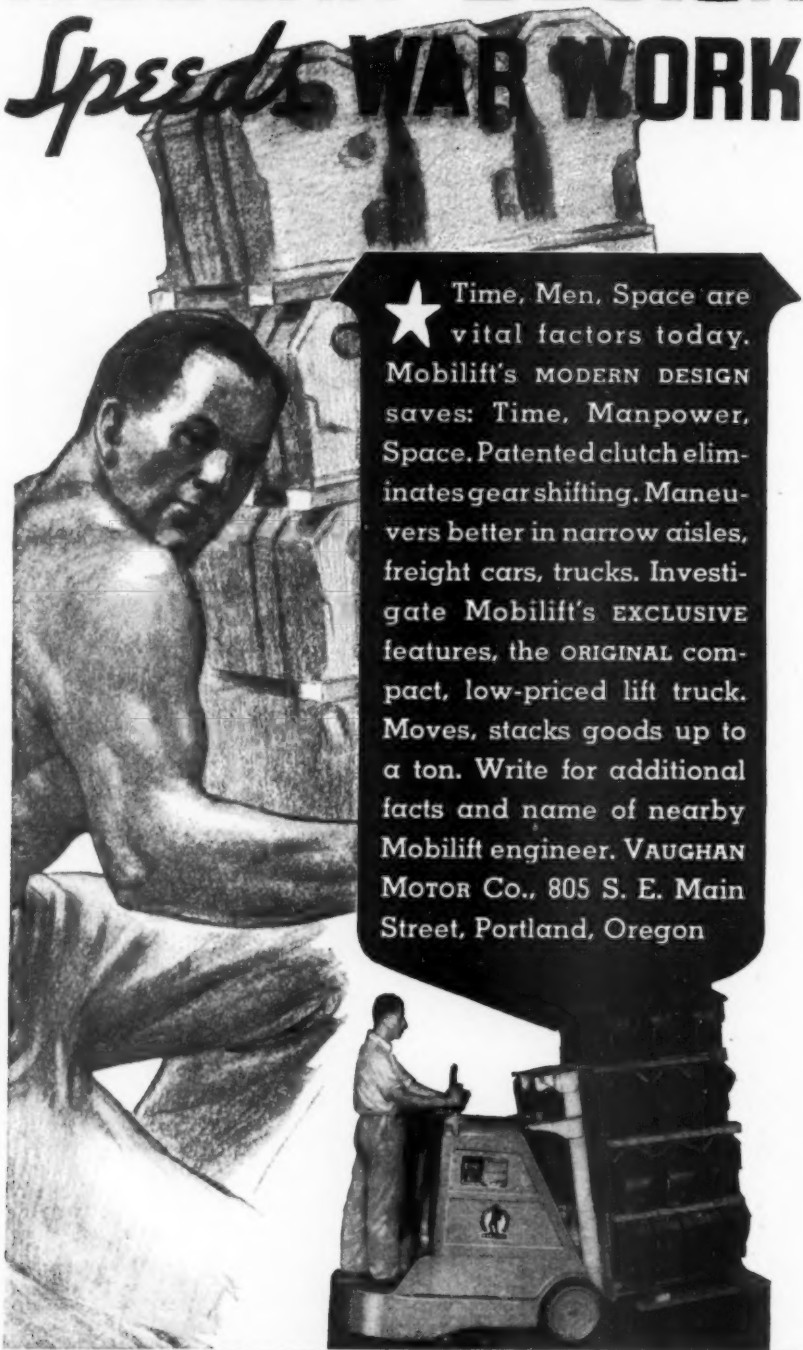
rable, firesafe concrete will serve you well, whether the main concern is war emergency or low-annual-cost service.

**PORTLAND CEMENT ASSOCIATION, Dept. 4a-12, 33 W. Grand Ave., Chicago, Ill.**

A national organization to improve and extend the uses of concrete . . . through scientific research and engineering field work

**SUPPORT THE RED CROSS . . . BUY DEFENSE STAMPS AND BONDS**

# MOBILIFT MODERN DESIGN *Speeds* WAR WORK



★ Time, Men, Space are vital factors today. Mobilift's MODERN DESIGN saves: Time, Manpower, Space. Patented clutch eliminates gear shifting. Maneuvers better in narrow aisles, freight cars, trucks. Investigate Mobilift's EXCLUSIVE features, the ORIGINAL compact, low-priced lift truck. Moves, stacks goods up to a ton. Write for additional facts and name of nearby Mobilift engineer. VAUGHAN MOTOR Co., 805 S. E. Main Street, Portland, Oregon

*Moves materials like a Giant!*

man hours and floor space they can spare from defense work. Consumer demand evidently is tending more toward jeweled watches. The Census of Manufacturers reported 1939 production of non-jeweled watches as 25% below 1937 (peak year for the watch industry) in number of units, 26% down in dollar value. Production of jeweled watches slumped only 17% in units, 14% in dollar value in the same period.

• **Wartime Imports** — Shipments of Swiss watches, movements, and parts are still coming through. Import figures show that there's been plenty of anticipatory stocking up. Total U. S. imports of watches, movements, and parts came to over \$10,000,000 in 1939, \$13,000,000 in 1940, and \$14,000,000 in the first nine months of 1941. By comparison, imports were \$8,000,000 in 1938, \$10,000,000 in 1937.

Thus, companies like Gruen, Bulova, and Longines-Wittnauer (now merged with Bulova) which import Swiss watch movements for final assembly in this country have not suffered seriously. (Watches are assembled here to avoid the heavy duty on cases and adjustments.) Most retailers and wholesalers report better supplies of Swiss than of domestic watches.

• **Jewels and Springs**—There are two potential materials shortages, however—jewels and springs. Jewels—ground from genuine or synthetic rubies or sapphires—come from Switzerland. So do springs, the better ones usually are made of Swedish steel. Germany will let boats through with complete watch assemblies, but has clamped down on exports of jewels and springs, some of which can be used in aviation instruments and other war goods.

Springs can be, and are, manufactured in this country. Watch jewels could be. The hitch is not raw materials but the skilled labor required for grinding and polishing. It is cheap in Switzerland, expensive here. If a shortage does develop, it probably will not be for some time. Jewels are comparatively cheap and most watchmakers usually carry at least a two-year stock; today they undoubtedly have more.

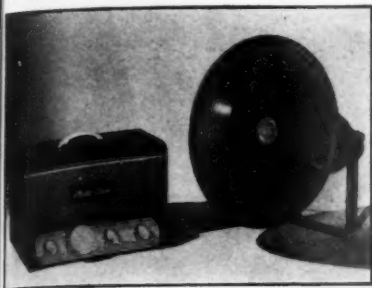
• **Price Factor**—Jewel prices have risen somewhat. The average watch repairman probably is paying around 30¢ for a synthetic jewel today, some 5¢ or 10¢ more than he paid a couple of years ago. Manufacturers pay about half that. (Large, genuine jewels for the finest watches can cost up to several dollars.)

The really serious shortage is not materials but men. Retailers report ruefully that it's almost impossible to keep a good watch repairman on tap. Tops for a repairman at his regular job is \$50 or \$60 a week. The aircraft instrument factories will double or triple that. Many owners of small, one-man shops are turning the key in the lock and taking themselves off to the nearest war plant.

# NEW PRODUCTS

## Electronic Siren

Reassuring voice announcements can be made over the new Electro-Siren before or after it has done its primary job of sending out air raid alarms, outside or inside buildings. The unit, which takes less than 25 lb. of critical material for manufacture, will duplicate the rising and falling of a standard rotary siren; or it can be set at any pitch which is best heard through a particular group of traffic and industrial noises. It is built on electronic principles by Audio-graph Div., John Meck Industries, 1313



W. Randolph St., Chicago, in several sizes with ranges from one to three miles, with the directional projector illustrated, or with a 360-deg. radial.

The siren, which is in effect a radio amplifier designed to howl with a purpose, can be operated on a 6-volt automobile battery any time that 110-volt power fails or is unavailable.

## Cuffless Trouser Aid

If the cuffless trousers of your new spring suit do not hang as they should, suggest to your tailor that he re-hem the bottoms over strips of Lamicel Fabric by a patented new process developed by Celanese Corp. of America, 180 Madison Ave., New York. Basically a thermoplastic, the material laminates wool cloth or wool-rayon mixtures when pressed under heat, adds weight and body for hanging trousers correctly.

## Automatic Calculator

In the fall of 1939, Remington Rand, Inc., Buffalo, introduced its "ten-key" printing calculator "which not only provides electrical addition, subtraction, multiplication and division, but prints all the factors in every calculation" (BW -Sep. 2'39, p. 36). Now the company is about ready to supply firms with high priorities with the new Remington Rand Automatic Printing Calculator which performs all the former model's functions, plus several new ones including the "multiplication of constants," as in payroll figuring. You enter a common factor like an hourly rate just once; you

can then re-enter it any number of times by touching a "constant key."

Division is a matter of entering the dividend and divisor; the quotient and any remainder are printed automatically



after the divide key is touched. Simple new means are provided for finding and printing correct decimal points in quotients of divisions and products of multiplication.

## Enameled-Bonderized Strip

Many metal articles formerly stamped and drawn out of aluminum, brass, galvanized steel, tin-plate, or zinc strip can be manufactured similarly out of "Flex-erized Enameled Strip," new development of Enameled Metal Strip Corp., 20th and Walnut Sts., Allentown, Pa. Before the steel strip is enameled or lacquered in any one of many colors, it is "bonderized" by the Parker rust-proofing process. It can be had in any width up to 24 in., any length.

## Welders' End Brush

Designed especially for cleaning scale, slag, spatter, or oxidation from welds



in inside corners, the new power-driven Osborn End Brush already is speeding war production. Osborn Mfg. Co., Brush Div., Cleveland makes it in a single 1/2-in. size, but with three different diameters of wire "bristles" to "get into any space . . . accessible for welding."



● Don't let your stepped-up war production become ineffective because of dangerous delay in delivery. Smash the shipping room bottleneck.

General Box standard and specially designed containers help scores of concerns keep shipments in step with production—eliminate damage—save floor space as well as dollars.

Let a General Box engineer recommend the box, crate or special container best suited to your requirements. And remember there are 13 strategically located General Box plants.

**SEND FOR THIS  
FREE MANUAL**



See how products similar to yours are being packed and shipped to avoid shipping room bottlenecks.

## GENERAL BOX COMPANY

General Offices: 502 N. Dearborn St., Chicago, Ill.  
District Offices and Plants: Brooklyn, Cincinnati, Detroit, East St. Louis, Kansas City, Louisville, Milwaukee, New Orleans, Sheboygan, Winchendon.  
Continental Box Company, Inc.: Houston, Dallas.

- ☐ Send a free copy of the booklet illustrating engineered shipping containers.
- ☐ Have a General Box engineer call

Name

Address

City  State

# LABOR & MANAGEMENT

## G. M. Hits Back

This week's public debate on Reuther Plan and company's counterdemands on union herald end of defensive tactics.

General Motors has reversed a five-year-old labor policy. It has stopped fighting a rear-guard action against C.I.O.'s United Automobile Workers and has proceeded to take the initiative.

That was the underlying significance of this week's unprecedented press conference called by G.M.'s president, C. E. Wilson, to provide a public forum for a debate with union leader Walter Reuther on the now famous Reuther Plan (BW—Jan. 17'42, p60).

• **Burying a Dead Issue**—That debate set the tone for the current negotiations over a new G.M.-Union contract—negotiations which were interrupted while Wilson sought to give the Reuther plan what he described as a "proper burial."

The setting for the debate was the Auditorium in G.M.'s home office building. Presiding as moderator was George Denny, Jr., president of Town Hall, whose fee of \$400 was paid by the corporation. G.M. also provided wall charts and diagrams to illustrate points in the discussion, and real Allison and Pratt & Whitney aircraft engines to illustrate the corporation's war effort.

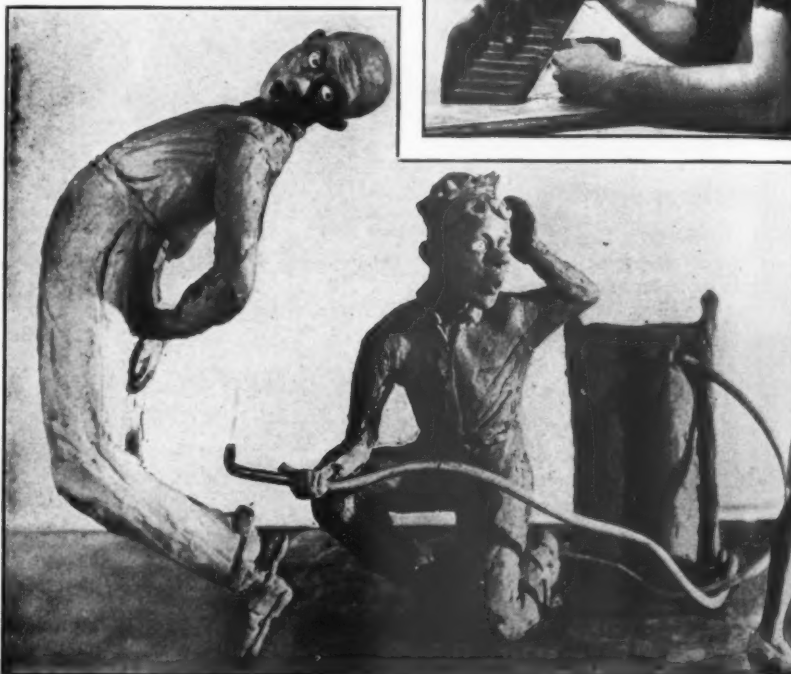
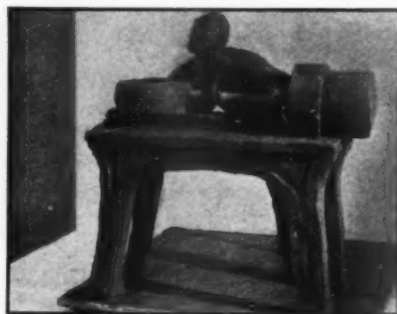
• **U.A.W.'s Contribution**—U.A.W. contributed only a thin pamphlet, "500 Planes a Day," and its author, Reuther, who had written it in December, 1940. Text of that pamphlet, which is subtitled "A Program for the Utilization of the Automobile Industry for Mass Production of Defense Planes" was the subject matter in an all-day session.

Yet, except for the time Wilson and Reuther spent in arguing about the plan's practicability during 1940 and 1941, the debaters found themselves talking at cross purposes. Reuther, although insisting his plan, if adopted now, would aid substantially in expediting war output, had little to say about what the corporation could now be doing that it isn't doing. Typical of his criticism of the automobile industry was his citation of the tank-building program. He pointed out that G.M., Ford, and Chrysler are all building the same M-4 tank, but that each is powering it differently. He criticised G.M.—and Chrysler by implication—for not standardizing on the Ford engine which, he maintained, was the best and most readily available of the three.

To this Wilson replied—as he was able

to answer most of Reuther's arguments—that tank specifications and over-all direction of methods for their production are up to Army procurement officers and WPB. He pointed out that none of the three models had been proved in action, and declared Reuther's suggestion that one is better than another was purely a matter of opinion.

All the major points Reuther presented were criticisms not of G.M.'s present operations, save as he maintained that they were typical of all American business, but of government direction of production or the lack of it.



### OTTO NOBETTER

Through the blundering antics of Otto Nobetter, a plastic personage on the staff of Allison News, house organ of Allison Division of General Motors, Indianapolis, plant safety is humorously but effectively promoted.

• **Jockeying For Position**—G.M.'s attack on the Reuther Plan is only an opening move in a game where the real stake is union power in the corporation's plants. Extent of this power will be determined in the contract-renewal negotiations over the forms of rules, regulations, and prohibitions which govern conditions of employment.

Since G.M.'s operations were paralyzed by the sit-down strikes of 1937 and the resultant signing of a union contract, each succeeding year has brought further restrictions and limitations on the corporation. Although G.M. management bargained hard and long on each new contract, it always was on the defensive. Growing in power, U.A.W. drove ahead to wrest more and more concessions from a man-

Created in clay by William Diven (upper right), associate editor, Otto is being reproduced on plant safety posters in poses which come perfectly natural for him such as (1) sliding down a banister, (2) being strangled by his own necktie, and (3) forgetting business for a blonde.

agement which knew the best it could do was hold the status quo.

• **Turning a New Leaf**—This year all that is changed. A strike in G.M. is unthinkable. The company sees the war, its rôle as the government's biggest supplier, and a rising tide of public sentiment that is antiunion as an opportunity not only for rebuffing U.A.W.'s current ambitions—which are a flat \$1-a-day wage increase, a union shop, and a battery of other related things—but for actually cutting down the union's power and freeing itself of some union-imposed rules. G.M. is convinced that its productive energies can be more effectively focused on war work if it can get on with the job without marching in lockstep with a union.

To be sure, G.M. isn't considering getting completely rid of U.A.W. But each one of the nine "demands" which the corporation has made on the union—and the fact that the company is entering counterdemands betokens reversed rôles—is designed to narrow the union's sphere of activity.

• **Company "Demands"**—The company strikes at basic union tenets when it proposes changing the contract to provide for wage differentials and job transfers on a merit basis, piecework pay instead of hourly rates, 50% reduction in the number of union committeemen and less power for those who remain, and sole discretion over job assignment.

Now, following the public debate over the Reuther Plan, G.M. and the union return to private debate over their contract.



## YOU CAN'T DO THIS TO ME!

William Green, A.F.L. chief, is pained at the very thought that the House Naval Affairs Committee would so much as discuss suspension of the Wage-Hour Act as proposed in the Smith-Vinson bill, which is opposed by the Administration.

## Slowdown Hit

Trouble at Alcoa plant in Cleveland brings decisive action by N.W.L.B. special representative. Four shop stewards fired.

More than one union leader has found the slowdown a potent weapon for clubbing an employer into submission. The slowdown also can become a habit. That, to all appearances, is what it had become in the seething Aluminum Co. of America plant in Cleveland, which boiled over with unsavory publicity for both sides last week, then cooled down as a result of action by a special investigator for the National War Labor Board.

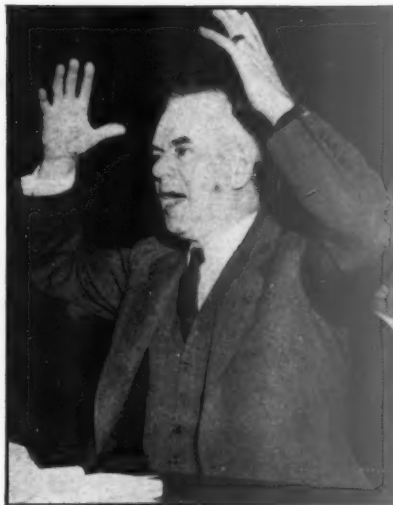
• **Used in Winning Recognition**—The C.I.O. National Assn. of Die Casting Workers first used the slowdown in Alcoa's Cleveland plant a year ago, at the start of its drive for union recognition. The National Labor Relations Board called an election last April 25, which the union won. The Assn. of Die Casting Workers, now amalgamated with the C.I.O. Mine, Mill and Smelter Workers, became the sole bargaining agent for about 7,000 production workers.

Every time the union had a grievance, there was a slowdown, usually confined to one department, but which could be felt throughout the plant. A climax arrived last June when all work stopped for two days. The National Defense Mediation Board intervened and settled the dispute with a series of wage adjustments.

• **A Succession of Slowdowns**—Leader of the strike was Alex Balint, regional director of the union, a Hungarian whose citizenship application has been held up by charges that it contained fraudulent statements. Company officials charge that Balint was so pleased at the results of the slowdown technique that he kept right on going with it. Every time there was a union grievance there was another slowdown. Each time Balint came back with a charge that the slowdown was the company's fault because of "stalling and haggling," or failing to adjust union grievances.

In August, there was a dues picket line, which the company said had the effect of slowing down operations by keeping delinquent members off the job. In December, there was a slowdown in the smelting division.

• **Latest Trouble**—The smelting division was the scene of the latest slowdown, which began Mar. 17. Balint said it stopped as soon as the union officials found out about it and issued a leaflet telling members, "Slowdowns must stop." The company said it didn't stop right away. The immediate cause was



## AND I TELL YOU AGAIN...

There's no mistaking the feeling of Philip Murray, C.I.O. president as he reiterates before the House Naval Affairs Committee his firm opposition to changing overtime pay standards.

a new company order that took one or two men off each furnace crew. Union members asserted that this itself was actually a "slow-down," that it prevented workers from earning a production bonus.

Mayor Frank J. Lausche of Cleveland spent a day in Washington and came home with a blistering statement to the effect that the government thought Cleveland was falling down on its war production obligations. He referred to a slowdown that had a "direct bearing on the speed with which vital aircraft equipment is being manufactured," without naming the Alcoa union. He called a meeting of his War Production Committee of six union leaders and six industrialists.

• **Trouble Shooter**—Meanwhile, the War Labor Board, working hand in hand with Army authorities in Cleveland, sent in a trouble shooter. He was W. E. Baldwin, a Cleveland law-book publisher who had been serving without pay or expense money as a "special investigator."

Baldwin called the union leaders on the carpet. He also called company officials into a separate meeting. The result was an agreement, publicly approved by the union, to fire four C.I.O. shop stewards held responsible for instigating the slowdown. It was hinted that unless the instigators could prove they were misguided and not malicious, they might be clapped in jail.

Baldwin, who edits and publishes state codes for a number of states, said he volunteered for responsible war work because he got tired of listening to men



who sat around and complained about how war production was going.

• **Plenipotentiary**—Like other National War Labor Board special representatives, he occasionally gets full authority to settle labor difficulties, which he did recently in a jurisdictional dispute in Toledo. The board wired him that his decision would be final.

Baldwin is a Republican, a fact which he says is of no significance at present. He says he enjoys listening to one side of a question at Cleveland's Union Club, to which he belongs, and to the other side at Helen's Kitchen, where aluminum workers congregate across the road from the Alcoa plant.

## It's Kearny Again

A "final determination" of long-fought maintenance-of-membership issue is promised by NWLB as rehearing starts.

The Federal Shipbuilding & Dry Dock case was one of the most celebrated labor disputes on which the old National Defense Mediation Board acted. Its recommendation that the C.I.O. shipbuilders' union should have a "maintenance of membership" contract, under which every employee who was a union member had to remain a member or be fired, was rejected by the company and a strike resulted (BW—Aug. 16 '41, p. 66).

• **In Comes the Navy**—That strike ended when the government took over the company's Kearny (N. J.) yards and put them under Navy operation (BW—Aug. 30 '41, p. 15). The decision and what followed probably did more than anything else to make employers think that NDMB was antimanagement.

While the Navy ran the yard, 20 employees dropped out of the union and the union demanded that they be instructed either to rejoin, or be dropped from the payroll (BW—Nov. 15 '41, p. 74). The Navy stalled on the union's petition and, when the union insisted on a decision, referred the matter back to NDMB for instructions. Shortly afterward, NDMB was mortally injured by the captive-mine strike.

• **Old Question Arises Again**—After war was declared, NDMB was transformed into the National War Labor Board; the Navy found a more urgent use for its personnel than running Kearny; and Federal was turned back to private management. The union joined the swelling labor chorus of no-strike pledgers, but it never forgot the 20 workers who had strayed from the fold. It resumed its attempt to get Federal's management to accept maintenance of membership and discipline the 20 renegades.

Yet the interlude of Navy operation hadn't changed the company's mind. It still refused.

Convinced that the shipbuilding company could not be talked into accepting "m. of m.," the union took up the cudgels again in Washington. Its object was to get NWLB to tell the company the old NDMB recommendation still stood. In that it was unsuccessful. But this week the board began rehearing the case, promised to "make a final determination" which would clear up the controversy. Use of the unequivocal phrase "final determination" led to the conclusion that NWLB expects to get company and union compliance with its ruling, even if the Navy has to be called in again.

## FORGE 'EM FASTER

Shells are forged faster and more efficiently when die lubricants contain "dag" colloidal graphite:

1. Dies and mandrels last longer.
2. Automatic lubricators can be used.
3. Spray nozzles will not clog.
4. Forgings are produced to closer dimensions.

Write for new Bulletin No. 230U and name of your local supplier.

ACHESON COLLOIDS CORPORATION  
PORT HURON, MICHIGAN

The graphite in "dag" products is made in the U. S. A.

"Dag" is a registered trade-mark of A. C. C.

# FINANCE

## Easy Arms Credit

With the military now able to make loans or to guarantee them, contractors are offered a wide variety of financing aids.

Recent orders vesting the Army, Navy, and Maritime Commission with sweeping powers to underwrite arms contractors is the latest result of Washington's determination to feed war production all the credit it will take. The three agencies are now authorized to lend unlimited amounts to contractors or subcontractors who require financial assistance or they can guarantee principal and interest of loans made to arms manufacturers by other government agencies or private institutions.

Main object of the measure is to provide working capital for small enterprises which find difficulty in borrowing on their own credit alone.

• **Take Your Pick**—The system of direct loans and guarantees, however, is only one of the credit aids Washington has made available. Since the beginning of the defense program, authorities have been developing a variety of financing plans designed to furnish the contractor with capital on terms tailored to his needs and credit standing.

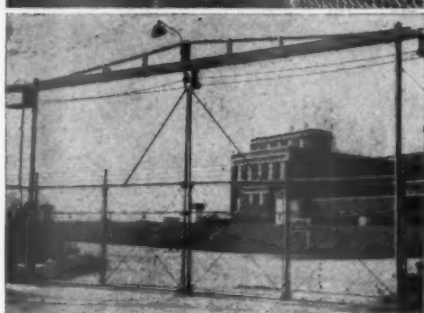
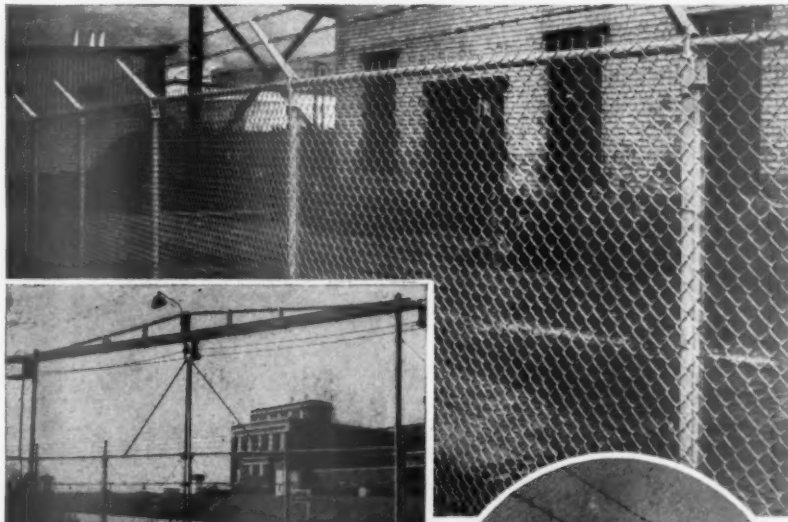
The War and Navy Departments will write their contracts with an assignment clause which enables the manufacturer to use his contract as security for a loan from a commercial bank. If private banks are hesitant, the contractor can appeal to the Reconstruction Finance Corp. for assistance. RFC has liberalized its terms on loans for war production, and stands ready to make generous advances either for working capital or for expansion. It may make loans direct to the contractor, or it may cooperate with private banks, guaranteeing their loans or assuming part of them.

In some cases involving plant expansion, RFC asks only a mortgage on the facilities built with its loan. Other resources of the manufacturer are not subject to assessment.

• **Reserve Banks' Role**—Federal Reserve Banks play a similar rôle, either lending directly to the manufacturer or underwriting advances by private banks. The Federal Reserve Banks are supposed to step in only under exceptional circumstances, and their loans are limited to five years' maturity. Aim is to provide working capital in emergency situations.

• **For Expanding Plant**—If the contractor desires assistance in financing plant expansion, several other avenues are open to him: (1) He can build the

# Spies and Saboteurs —don't like Cyclone Fence!



Spies and saboteurs know that their chances are far from good when a plant is enclosed with U-S-S Cyclone Fence. They realize that the tough wire mesh and the barbed wire top make their job difficult—and are sure to spoil the get-away.

Cyclone Gates are easy to operate. The sliding gate illustrated above is controlled electrically from inside the plant. Cyclone single and double drive gates swing on ball-and-socket hinges.

The Cyclone Victory Fence at the right, with its barbed wire extended on both sides of the fence gives maximum protection. Other types of fence tops are available.

Cyclone's own factory-trained erection crews can build your fence for you. These men know how to build fence right. They are on our payroll and we are responsible for their work.

**T**HOUSANDS of plants vital to America's war effort are guarded from spies and saboteurs by U-S-S Cyclone Fence. Not only the plants themselves—but yard inventories, railroad sidings and parking lots as well. And many have extra enclosures around danger spots within their plants. Only when every person must show credentials at guarded gates can you feel sure about your property.

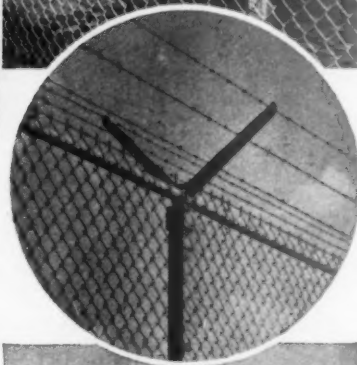
We will gladly help you work out your fence problems. There is no obligation in asking for the help of our experienced men. When you buy fence, remember this. More plant owners choose Cyclone than any other property protection fence. The reason is found in Cyclone's reputation for sturdy, long-lasting fence. In our fifty years of fence building we have learned how to do the job right.

**CYCLONE FENCE DIVISION**  
(AMERICAN STEEL & WIRE COMPANY)  
Waukegan, Ill. • Branches in Principal Cities  
United States Steel Export Company, New York



## CYCLONE FENCE

**UNITED STATES STEEL**



## 32-Page Book on Fence



Send for our free book on fence. Crammed full of facts, specifications and illustrations. Shows 14 types — for home, school, playground and business. Buy no fence until you see what Cyclone has to offer.

**CYCLONE FENCE**  
Waukegan, Ill., DEPT. 442

Please mail me, without obligation, a copy of "Your Fence—How to Choose It—How to Use It." I am interested in fencing: ☐ Industrial; ☐ Estate; ☐ Playground; ☐ Residence; ☐ School. Approximately \_\_\_\_\_ feet.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

# clues:

Turning the "Searchlight" on Opportunities  
 "clues" appears in 1st and 3rd issues of the month only.  
 Copy for scheduled issue required 5 days in advance.  
 RATES: 50 cents per word or \$2.50 per line (fraction) per insertion, payable in advance. Minimum charge \$2.00. Discount 10% on orders for insertion in four consecutive issues. Publication box number addresses count as 2 words; replies forwarded without additional charge. Address box number replies c/o Business Week, 330 W. 42nd St., New York, N. Y.



## PEOPLE

### positions wanted

- **WRITER OF TRAINING MANUALS.** technical experience, will plan, dig out essential material and prepare effective employee training including group leader instruction. Will analyze your needs; produce required material on businesslike schedule. Box 292.
- **EXECUTIVE,** broad experience in plant management and purchasing. Government Bureau experience. Graduate Eng. 47 years old. Box 291.
- **VIGOROUS EXECUTIVE.** Age 36. Graduate of Princeton and Harvard, Graduate School of Business Administration. Background includes ten years experience in important research and executive position with New York financial firm of high standing. Willing to assume unlimited responsibility with progressive industrial or commercial concern. Box 286.
- **SUPERIOR EXECUTIVE.** Available Express Essential Requirements. Will reply if suitable. Box 288.
- **EXECUTIVE** available broad experience Oil, Machinery, Transportation, Industries and Government Bureau. Graduate Engineer, 46 years old. Box 285.
- **MANUFACTURING EXECUTIVE** available. Broad experience in organizing and developing production possibilities of plants. Experienced in twenty-four hour, seven day operation. Box 289.

### employment service

- **THOROUGHLY ORGANIZED SERVICE** of 32 years' standing and reputation, carries on preliminary negotiations for positions in the higher salary bracket. Procedure is based on an aggressive campaign individualized to each client's personal requirements. Moderate retaining fee protected by refund provisions. Identity covered and present position protected. Send only name and address for details. R. W. Bixby, Inc., 282 Delward Bldg., Buffalo, N. Y.

## SERVICES

### wood and metal patterns

- **OLDEST ESTABLISHED** pattern and machine works on Long Island can take on additional wood and metal pattern work. Eppenbach, Inc., 4510 Vernon Blvd., Long Island City, N. Y.

### industrial consultants

- **CONVERSION-EXPANSION TROUBLE!** Industrial Engineers, Labor Relations Specialists for production, methods, control, labor-management readjustments. Bambrick, Blazek & Associates, 152 W. 42nd St., NYC.

### production increase

- **NATIONALLY-KNOWN** firm of consultants with successful record offers method for increasing production adaptable and effective in most plants without adding equipment. Details on request. No obligation. Methods Engineering Council, Wood and Franklin Streets, Station 31, Pittsburgh, Penn.
- **STRICTLY CONFIDENTIAL**—The publishers of Business Week recognize that, in advertising employment or other "opportunities" in "clues", the use of a box number address in its care is dictated by circumstances which require that the advertiser's name be kept "strictly confidential". Replies to such advertisements are forwarded each day as received, without additional charge.

NEXT ISSUE for "clues" ads April 18.  
 Copy required April 14.



When the President signed the executive order relaxing restrictions on direct government loans to small businessmen engaged in war production, Senator Capper of Kansas, a veteran champion of small business, was the first to express his appreciation.

Grouped around the President (left to right) are Senators Murray of Montana, Capper, and Mead of New York, Undersecretary of War Patterson, Undersecretary of the Navy Forrestal, and Admiral Land, chairman of the Maritime Commission.

plant himself and be repaid by the government over a five-year period; under this system the government will own the plant at the end of five years, but the contractor has the right to return the payments and retain ownership; (2) he may arrange to have the government build the plant and lease it to him; (3) he may make an agreement with the Defense Plant Corp. (a subsidiary of RFC) under which DPC builds the plant and the contractor operates it under a five-year lease; at the end of the five-year period, the contractor has the option of purchasing the plant at an agreed price.

Credit assistance offered by government agencies supplements ordinary accommodation by commercial banks. Most manufacturers have their own resources, and many of them find it unnecessary to ask government aid.

• **Helping to Find Help**—To guide the manufacturer through the complicated system of choices, the War Production Board maintains a staff of financial experts. Contractors needing assistance can call on the local field office of WPB for advice about how to obtain it most rapidly. The WPB staff will also present the contractor's case to the various lending agencies, and arrange for special consideration in emergency cases.

## PLANE MAKERS INSURED

Vast expansion of the aircraft industry, involving steadily growing payrolls, has made it one of the best current customers for group life insurance. The

Glenn L. Martin Co. plants at Baltimore, for instance, heretofore without any group contract for employees, have signed up with the Connecticut General Life Insurance Co. of Hartford for one of the most comprehensive group contracts ever undertaken. Aviation Insurance Sales, Inc., Chicago, was consultant.

A weekly premium of 40¢ deducted from the employee's pay check gives him \$1,000 of life insurance protection, \$1,000 of additional accidental death and dismemberment insurance, \$10 weekly accident and sickness benefit, and reimbursement of hospital expenses up to \$4 daily, plus \$20 fees and \$150 surgical fees. Workers earning more than minimum wages will pay and receive proportionately higher allowances.

## COMMODITIES

### Cotton Climbs

Price runs up to highest level since 1929. Quotations on finished goods, hitched to raw staple, are pulled along.

This was a busy and prosperous week for all units of the cotton industry, from growers on up to manufacturers and sellers of finished materials. With the March, 1943, delivery (New York)

# THE MARKETS

A lot of things have happened to gold since 1931 when Britain devalued the pound and since 1933 when the United States followed suit. Latest in this chain is the succinct indication of the War Production Board that gold output can go hang if it gets in the way of industry's base metals (BW—Mar. 14 '42, p. 24).

• **A Matter of Priorities**—The WPB's edict said simply that gold and silver miners were to be denied the use of mining's blanket priority rating for equipment if more than 70% of the value of their output was in the precious metals. It develops, however, that there was a loophole. The WPB is granting individual priority ratings to those mines that produce a fair amount of byproduct base metal even though it isn't up to the 30%-of-value mark.

Marketwise, the gold mining shares clearly show the hardships to which this type of mining has been subjected since war broke out in 1939. There has, of course, been the continuous discussion of what was to become of the time-honored gold standard in the postwar world. But it's doubtful that this has meant as much as far more tangible factors.

• **Pegged Price, Higher Costs**—Leading difficulty has been the pegged price—\$35 an oz.—in a period of rising costs. Major gold mining stocks now are selling at barely one-third to one-half their best prices between 1933 and 1939, and one, Alaska Juneau, which has had a good bit of labor trouble, now is under \$2 a share, against a 1933 peak of \$33.

Confining the discussion to the period since the war started, the average price of four representative gold stocks has fallen 56.8%—from 38.4 to 16.6. Over the same period, the average of eleven

base-metal mining shares has dipped from 32.9 to 28.1, or 14.6%, and 50 industrial stocks have lost 25.3%.

• **Other Comparison**—The period since the fall of France provides another interesting comparison: Base-metal shares have risen 11.5%, the 50 industrials have receded 6.8%, and the gold group is down 19%. And, during the disappointing market last month, the industrials went off 5.9%, the base metals 6.3%, and the gold stocks 17.8%.

Divergent movements between the gold stocks and other nonferrous metals can best be explained in the light of prospective output. For industrial metals, demand far outstrips supply, and the fervent hope is that production will rise to one record after another. Gold mining, on the other hand, seems destined for curtailment.

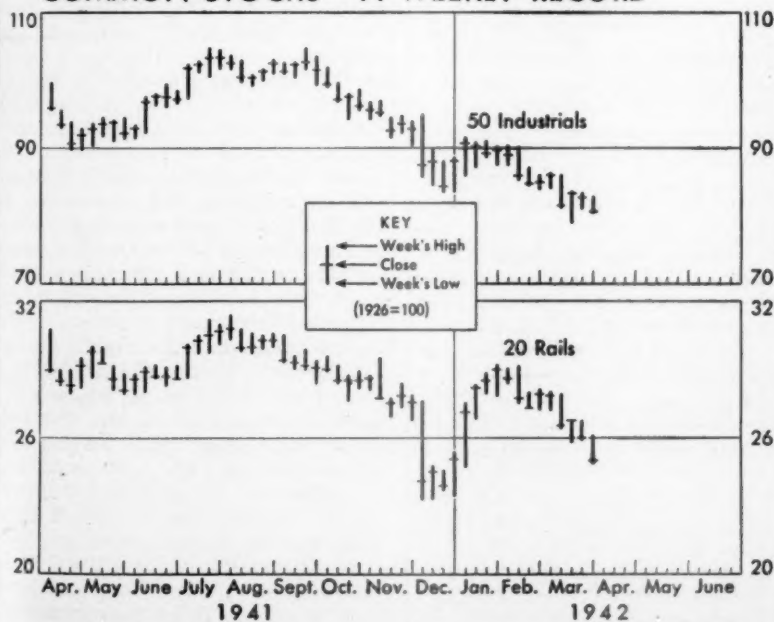
• **Close Pricing**—Main event of this week in the financial markets was sale of \$10,000,000 of Union Electric (Mo.) 3½% bonds at a price ½ of a point above the bid price on the New York Stock Exchange for other bonds issued under the same mortgage.

## Security Price Averages

	This Week	Month	Year
	Week Ago	Ago	Ago
<b>Stocks</b>			
Industrial ..	80.8	82.8	86.1
Railroad ...	25.0	26.0	27.8
Utility ....	29.4	30.4	33.1
<b>Bonds</b>			
Industrial ..	106.0	106.0	106.7
Railroad ...	89.1	89.5	87.8
Utility ....	101.2	102.4	103.6
U.S. Govt. .	110.6	110.9	109.4

Data: Standard & Poor's Corp. except for government bonds which are from the Federal Reserve Bank of New York.

## COMMON STOCKS — A WEEKLY RECORD



# A

## GOOD PLACE FOR YOUR BUSINESS



Cleveland is a good place for your business.

Here are located iron and steel industries of vast importance to a nation at war. Cleveland's shipping tonnage ranks with that of the world's important ports; Cleveland has one of the largest and best-equipped airports in the world, and is one of America's greatest railroad centers.

Chemicals and paints, metal products and machine tools, building materials and electrical equipment are among the many vital products manufactured in great quantities here.

The commercial and credit facilities of Cleveland's oldest banking establishment are at your service. One of our officers will be glad to assist you.

## THE NATIONAL CITY BANK OF CLEVELAND

EUCLID AT EAST SIXTH  
 &  
 TERMINAL TOWER BLDG.



MEMBER FEDERAL DEPOSIT  
 INSURANCE CORPORATION

# ADVERTISERS IN THIS ISSUE

Business Week—April 4, 1942

ACHESON COLLOIDS CORP.....74	JOHNSON & HIGGINS.....3
Agency—HYATT EBY	Agency—DORRUM & CO.
ACME STEEL CO.....55	G. S. LEWIS CO.....44
Agency—THE BUCHEN CO.	Agency—BERT S. GITTENS, ADVERTISING
APEX RAILWAY PRODUCTS CO.....57	THE LIQUIDOMETER CORP.....43
Agency—WILLIAM HART ADLER, INC.	Agency—LUCERNA CO., INC.
ASSOCIATION OF AMERICAN RAILROADS.....6	MANNING, MAXWELL AND MOORE, INC.....31
Agency—ARTHUR KUDNER, INC.	Agency—BRIGGS & VARLEY, INC.
ATLAS FENCE CO.....79	MARYLAND CASUALTY CO.....21
ATLAS POWDER CO.....53	Agency—J. M. MATHES, INC.
Agency—ALBERT FRANK-GUNTHER LAW, INC.	GEORGE S. MAY CO.....4th Cover
THE AUSTIN CO.....24, 25	Agency—JIM DUFFY, INC.
Agency—FULLER & SMITH & ROSS, INC.	McGRAW-HILL BOOK CO., INC.....58
AXELSON MFG. CO.....34	McGRAW-HILL PUBLISHING CO., INC.....39, 40, 41, 42
Agency—THE MCCARTY CO.	METROPOLITAN LIFE INSURANCE CO.....23
BRADLEY WASHFOUNTAIN CO.....54	Agency—YOUNG & RUBICAM, INC.
Agency—KIRKGASSER-DREW	THE MILLER CO.....37
BULL DOG ELECTRIC PRODUCTS CO.....3rd Cover	Agency—J. M. HICKERSON INC.
Agency—BROOKE, SMITH, FRENCH & DORRANCE, INC.	MINNEAPOLIS-HONEYWELL REGULATOR CO.....49
CARRIER CORP.....33	Agency—ADDISON LEWIS & ASSOCIATES
Agency—CHAR. DALLAS REACH CO.	MORTON SALT CO.....74
CLUES.....76	Agency—KLAU-VAN PETERSON-DUNLAP ASSOCIATES, INC.
THE COLSON CORP.....72	MUSSEY FORESTS, INC.....79
Agency—MEHRMANS, INC.	Agency—W. L. WRIGHT CO.
CONTINENTAL MOTORS CORP.....45	THE NATIONAL CITY BANK OF CLEVELAND.....77
Agency—WALLACE-LINDHMAN, INC.	Agency—McCANN-ERICKSON, INC.
CRANE CO.....63	NEW DEPARTURE DIVISION GENERAL MOTORS CORP.....2
Agency—THE BUCHEN CO.	Agency—J. M. HICKERSON INC.
THE CURRAN CORP.....50	NEWELL-EMMETT CO.....50
Agency—THE CALLAWAY ASSOCIATES	Agency—NEWELL-EMMETT CO.
CUTLER-HAMMER, INC.....10	NORFOLK & WESTERN RAILWAY CO.....42
Agency—KIRKGASSER-DREW	Agency—HOOCE & CO.
CYCLONE FENCE CO.....75	THE OHIO CRANKSHAFT CO.....27
Agency—BATTEN, BARTON, DURSTINE & OSBORN, INC.	Agency—THE GRISWOLD-ESHELMAN CO.
DEVOE & RAYNOLDS CO., INC.....38	OHIO TOOL CO.....71
Agency—J. STIRLING GETCHELL, INC.	Agency—MEHRMANS, INC.
DICTOGRAPH SALES CORP.....30	OLD TOWN RIBBON & CARBON CO.....44
Agency—RUTHBAUFF & RYAN, INC.	Agency—ARTHUR ROSENBERG, INC.
D. C. DURYEA CORP.....29	OWENS-ILLINOIS GLASS CO.....41
Agency—FITZGERALD ADVERTISING AGENCY, INC.	Agency—D'ARCY ADVERTISING CO., INC.
ERIE RESISTOR CORP.....38	PACKAGE MACHINERY CO.....43
Agency—W. S. HILL CO., INC.	Agency—JOHN O. POWERS CO.
FAIRBANKS, MORSE & CO.....56	PENN ELECTRIC SWITCH CO.....51
Agency—HENRI, HURST & McDONALD, INC.	Agency—LAMFORT, FOX & CO.
BRAD FOOTE GEAR WORKS.....79	PITTSBURGH CORNING CORP.....44, 45
Agency—PHILIP MORRIS ADVERTISING SERVICE, INC.	Agency—BATTEN, BARTON, DURSTINE & OSBORN, INC.
GENERAL BOX CO.....69	PORTLAND CEMENT ASSOCIATION.....67
Agency—THE BUCHEN CO.	Agency—ROCHE, WILLIAMS & CUNNINGHAM, INC.
GENERAL ELECTRIC CO.....32	THE RAULAND CORP.....48
Agency—THE LLOYD H. HALL CO.	Agency—GEORGE BRODSKY ADVERTISING
GENERAL ELECTRIC CO.....12	ROBBINS & MYERS SALES, INC.....59
Agency—LEIGHTON & NELSON	Agency—ERWIN WARREY & CO., INC.
THE GLOBE-WERNICKE CO.....58	ROYAL TYPEWRITER CO.....35
THE B. F. GOODRICH CO.....1	Agency—YOUNG & RUBICAM, INC.
Agency—THE GRISWOLD-ESHELMAN CO.	SWING-O-RING CORP.....79
GULF OIL CORP.....9	Agency—LEWIS & TOKAR, INC.
Agency—YOUNG & RUBICAM, INC.	VAUGHAN MOTOR CO.....48
HAMMERMILL PAPER CO.....64	Agency—BRAUMONT & HOHMAN, INC.
Agency—BATTEN, BARTON, DURSTINE & OSBORN, INC.	WARNER & SWASEY CO.....2nd Cover
HOTEL LENNOX.....74	Agency—THE GRISWOLD-ESHELMAN CO.
Agency—GARDNER ADVERTISING CO.	THE WAYNE PUMP CO.....34
INTERLOCKING FENCE CO.....50	Agency—BONSB ADV. AGENCY
Agency—EDWARD L. SROGVICK CO.	WILLSON PRODUCTS, INC.....8
INTERNATIONAL HARVESTER CO., INC.....47	Agency—JAMES G. LAMB CO.
Agency—AUBREY, MOHR & WALLACE, INC.	YORK ICE MACHINERY CORP.....4
THE INTERNATIONAL NICKEL CO., INC.....52	Agency—J. M. MATHES, INC.
Agency—MARSHALL & PRATT, INC.	

touching 20.06¢ a lb., 1.71¢ above the marked-up parity announced Monday, futures prices were highest since April, 1929.

● **Print Cloth Goes Up**—Inasmuch as it is tied to raw cotton, the ceiling price on grade A print cloth was advanced automatically by  $\frac{1}{4}$ ¢ to 48¢ a lb., highest since the flexible schedule was put into effect by the Office of Price Administration. Whenever the price of raw cotton moves 0.43¢ a lb., the price of cloth may vary  $\frac{1}{4}$ ¢ a lb. in the same direction (BW—Nov. 1'41, p. 57). And retailers reported the largest volume of pre-Easter sales for many years.

But of greatest interest to the trade was the opening on Tuesday of bids on 351,300,000 yd. of goods for the Army Quartermaster Depot, an all-time record volume of material handled in a single transaction. As this came on the day that the new peak price of raw cotton was established (20.37¢ a lb. average at ten designated markets), permissible maximum price of the basic 38½-in. 64x60 5.35-yd. was 8.971¢ a yd., highest since 1924 when 9½¢ was reached with raw cotton at 35.7¢ a lb.

● **Underwear Bids**—Bids also have been submitted recently to the Army and Navy on 53,000,000 undergarments. This has forced underwear manufacturers to reject or defer offerings of civilian garments to the regular trade until they receive their government allotments so that they can determine exact excess capacity.

Total cotton consumption next year is expected to reach 13,500,000 bales, including exports under the lend-lease agreement, according to J. B. Hutson, president of the Commodity Credit Corp. Hutson added that consumption now is more than 45,000 bales per operating day and will go higher when all mills adopt the 24-hour day and 7-day week and when textile orders boost production of coarser yarns.

● **The Operating Record**—The industry doubts, however, that cotton goods production can be stepped up very substantially above the present rate. Active spinning machinery in February ran an average of 22.6 hours a day on the basis of a five-day week (19 hours a day on basis of a 6-day week). Approximately two-thirds of current production is said to be going into defense requirements.

Production of cotton cloth is running well above last year's all-time high record of 11,898,362,000 sq. yd., which in turn was a 20% boost over the 1940 total. Spinning activity is running 15% above last year and cotton-mill consumption for January and February gained 246,000 bales over the first two 1941 months. Cotton consumption last year, aggregating 10,583,000 bales, was one-third more than in the record preceding year and more than double the 1932 total.

# THE TRADING POST

## MacArthur, the Workman

Like most Americans, I have been reading and rereading the story of General MacArthur and his career. It is a stirring tale, anyway you look at it. But I take it we are not reading that story these days just for a thrill, or for entertainment, or to kill time. We are hoping to find in it some inspiration that will help us all to do our own jobs better.

So I wonder sometimes whether we don't bear down too hard on the glamorous qualities that set MacArthur apart as a national hero and not enough on those more homely and practical traits that you and I can put to personal use.

Obviously, we can't all be distinguished graduates of West Point. Neither are we all endowed with personal charm and brilliant minds. Few of us could hope to match the physical courage of a MacArthur in battle. Few have what it takes to kindle in others the zeal that inspires to killing toil, reckless valor, and supreme self-sacrifice.

Douglas MacArthur has all these qualities. They are the outward token of his inherent strength. They all have had a part in everything he has done. He will need them all in the tougher task he now has assumed. Yet, if we think that these qualities explain the man MacArthur, I suspect that we are mistaken. If we seek in these alone the source of his strength, we shall deceive ourselves. For that overlooks the one quality that feeds all the others, a quality, thank God, that is not confined to soldiers or, indeed, to leaders in any sphere.

That master quality, the key to greatness in whatever station, is wholehearted loyalty to the day's work—whatever it may happen to be.

\* \* \*

What I mean will be clear if you recall the MacArthur of 1937. That is when he retired from the United States Army to become field marshal of the Philippine Army. He was then 57. Already he had won, you might think, all that his profession had to offer. He had led his class at West Point. He had distinguished himself in France. Then he had gone back to the Academy as its superintendent, only sixteen years after he had been graduated. In 1930 he had been made Chief of Staff. In 1937 he could look back upon a long service to his country, rich in achievement, crowned with distinction and honor.

Right there might well have been the end of MacArthur. He might easily have slid gracefully into retirement, secure in his record, lapped comfortably in his ample honors.

But right there is where MacArthur

revealed his really basic quality. For when he undertook to create an army for the embryo Philippine nation, he could hardly have been chasing personal glory. On that score he could gain little and lose much. Indeed he was criticized and ridiculed for doing it. But he took all that in his stride, for his mind was set, not on the approval of others, but on a job of work that needed to be done. And into that job he threw himself with all the ardor of a shavetail assuming his first command.

MacArthur became no tropical pensioner. He did not choose the easy way. For in his new post he had to fight all over again the battle of the soldiers against the politicians. He slaved to equip and train his little army. He studied intensively the ground he might have to defend. He contrived equipment and evolved tactics to meet situations that others scornfully predicted could not arise. Into his modest command he poured every ounce of his energy, every spark of his genius, every lesson of his professional experience.

The epic defense of Bataan since last December was not improvised under the spur of Japanese invasion. It was long since conceived and planned by MacArthur and his men to anticipate the day of need. The so-called "Miracle of Bataan" was not pulled out of a magician's hat—it is the achievement of a man who knew his job, who respected it, and, above all, who worked at it.

\* \* \*

And now MacArthur of Bataan has captured the imagination of men the world over. Why? Because of what he has done? Yes, of course. But don't forget that he could do all that only because he was true to the day's work when others thought nothing about it or about him, because he spent his strength and his talents without stint and without acclaim on a task he had staked out for his own.

No one had to stand over Douglas MacArthur, field marshal of the Philippine Army—no one but MacArthur himself, plus a dominating sense of duty, plus a loyalty to the day's work, plus a driving self-discipline.

And that, it seems to me, is just about the heart of MacArthur's story. Each of us—in our own places—can be as big as MacArthur, can match MacArthur—if we will. But if we are going to do that, we must do it as he did it. We must stake out and master our own tasks—without being coaxed to them, or whipped to them, or bribed to them.

For above all else, MacArthur of Bataan is "a workman that needeth not to be ashamed."

W.C.

## "SUDDEN DEATH" IN YOUR CATALOG FAMILY?



**SWING-O-RING**  
loose-leaf binding

... keeps catalogs, manuals, etc. always up-to-date and off the "War Casualty" list. Today, with substitute materials and prices changing almost overnight, ordinary binding soon makes valuable material obsolete. Leading companies everywhere are swinging to Swing-O-Ring for War-timely insurance against "Sudden Death" in their catalog families. New, streamlined, with scissor-like action, Swing-O-Ring loose-leaf binding gives 600% greater page strength than old-style binders—with less weight and bulk. Available in lengths from 4" to 40". Write for name of licensee near you, today!

**SWING-O-RING, Inc.**  
Div. of The Fred Goetz Co., Inc.  
314 Dean St., Brooklyn, N. Y.

**FREE! LOOSE-LEAF MEMO BOOK**

• Get this handy pocket Memo Book with the new Swing-O-Ring binding. • See how Swing-O-Ring looks and works. Write on your firm letterhead!

**PROTECT WAR PLANTS**

**ATLAS CHAIN LINK**

**COMPLETE ATLAS FENCE CO.**  
FENCE SERVICE Dept. 58 PHILADELPHIA

**GEARS**

**Thousands on hand**

All new gears, Good Discount, Regular Warranty, all pitches, Spur, Change, Bevel, Mitre, Worm, Sprockets.

**SHIPMENT NOW**

Send for Bulletin No. 111

**Brad Foote Gear Works**  
1301 S. Cicero Av., Cicero, Ill.

**GROW XMAS TREES**  
OR FOREST

Write Today For Special Christmas Tree Bulletin and Complete Forest Tree Price List.

Per 1000

2 yr. Am. Red Pine.....	\$9.50
2 yr. Pitch Pine.....	8.00
2 yr. Colo. Blue Spruce.....	10.00

**MUSSER FORESTS Inc.**  
Indiana, Penna.

# THE TREND

## 48 HOURS AND 6 PER CENT

Congress has a bill before it to extend the statutory work-week from 40 to 48 hours, which means that employers would not have to begin paying overtime rates until workers had put in 48 hours of work, instead of 40. Congress also has under consideration a bill to limit profits on war contracts to 6%, which means that arms manufacturers would have a ceiling on profits but no limit on losses. Both measures are of the same stripe—and understandable.

When men are going into the Army at \$21 a month (plus board and lodging) and risking their lives in the bargain, it is only natural for people to argue that no one should be permitted to make capital out of the nation's necessity. They say—and not too calmly: "Business men ought to have a rigid ceiling on their profits—they're lucky they are permitted to make profits at all." Or: "Workers, instead of beefing about overtime, ought to be glad they're not in the Army." And so the arguments go. But they are hardly realistic arguments.

• **What the people in the United States want**—basically—is a maximum war effort. They want workers to put in long hours—turning out planes, tanks, ships, and guns in a steady stream. Yet, the proposals to change the 40-hour work-week and to put a ceiling on profits are hardly conducive to maximum output.

Let's examine that statement realistically.

First, as to the 40-hour week. It is true it raises operating costs, and, as a corollary, the ultimate price the country must pay for the war effort; it is likewise true that it puts more money into the hands of workers, hence increases the demand for civilian goods at a time when the supply is diminishing. Moreover, it does deter some manufacturers from fully using manpower and plant—those who would rather shut down when the whistle blows than pay premium wage rates.

• **On the other hand**, we cannot overlook this fact: The 40-hour work-week has become a habit—a tradition—in the American labor movement. Change the rules now, and absenteeism may very well result. In Germany, for instance, when the government did away with overtime, an immediate falling off in Saturday and Sunday plant attendance followed and Hitler was forced to restore overtime rates. Extending the regular-pay work-week from 40 to 48 hours is likely to have the same effect here. Will not some workers reason: I'd rather have my leisure than eight hours' pay. But 12 hours' pay—at time-and-a-half—might make an important material and psychological difference.

Furthermore, we face a potential labor shortage (BW—Feb.7'42,p16), and can't afford to alter overtime-pay schedules. Although particular industries, such as machine tools or airplanes, are putting in long work-weeks,

the country as a whole is still on a comparatively leisurely 40-hour week. Thus, in January, the average work-week in manufacturing industries was 41.5 hours; in retailing, the average was 42.1; in wholesaling, 40.9; in construction, it was down to 34.2.

• **Admittedly**, overtime pay will not end these industry-to-industry differences, but it will contribute to fuller use of our man-power. For we can set it down as axiomatic that workers will tend to gravitate toward overtime jobs. That is particularly probable if wage increases are kept under control, as now seems increasingly likely (BW—Mar.28'42,p13). Then, individual workers will have no way to boost their income except working longer hours. And as war industries draw off workers from non-war industries, the non-war industries, having smaller staffs, will be forced to step up the number of hours worked per week. Thus, overtime will tend to spread the work—now that there's plenty of it—both in civilian and in armament industries.

The point is that overtime pay provides an incentive to put in long hours and that is exactly what the country wants. And the same reasoning applies to business profits as an incentive to produce arms. But the legislation tacked on as a rider to the \$18,000,000,000 war appropriation bill seems as if it were designed deliberately to frustrate production. By rigidly restricting profits to 6% on these particular contracts, the amendment virtually guarantees that business men will shy away from them. Moreover, by restricting profits on war contracts, Congress would actually put a premium on non-war production. Since profits of companies engaged in civilian production or distribution would not be limited, such companies would be able to make more money than the arms producers. And that hardly makes sense. That's why, during the last war and so far in this one, we have adopted a high excess-profits tax, applicable to war and non-war industries alike—on the theory that civilian industries benefit from the war-induced rise in general business.

• **Yet, somehow**, the idea persists that Congress ought to coerce workers and business men in war industries to make sacrifices—just because they are working on government contracts. But that would be difficult to justify as an efficient way to go about getting maximum production. The war industries and war workers, after all, are doing the job the nation wants done and Congress would be unrealistic to place a penalty on their doing what the nation wants. Indeed, if it doesn't hurt the war effort as a whole, rewards for hard work well done would seem desirable. What's wrong with the economic incentive if it helps us win the war?

*The Editors of Business Week*

23

WEB  
AGY

←

YE  
AI

SINE  
EEK  
DEX